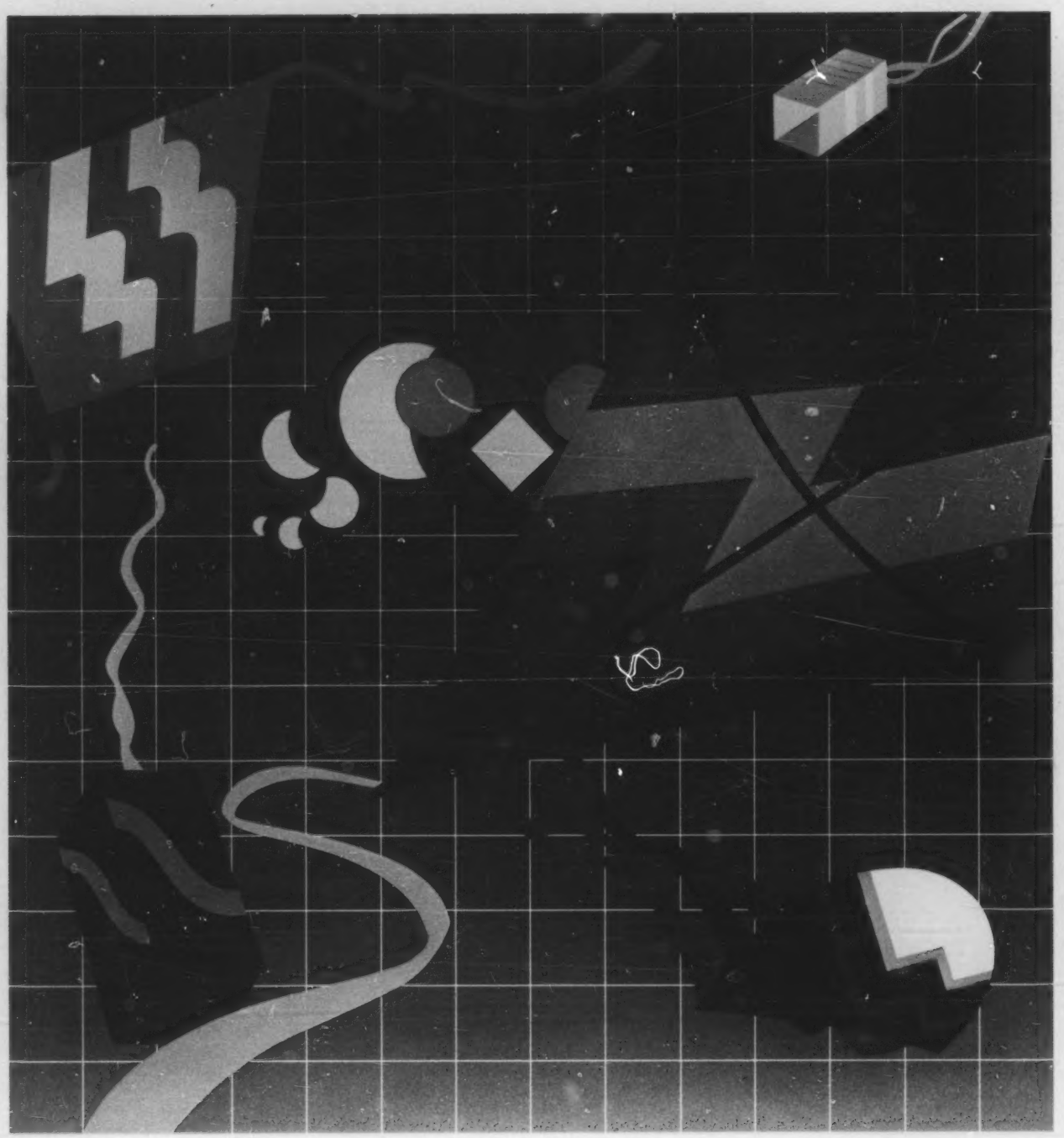
FORECAST 1988/1989



First Interstate Bancorp

Assumptions and Conclusions

The nation's policymakers were not satisfied with the slow, steady breezes of economic expansion during 1985 and 1986. They hoped to fly the country's sectoral and regional kites to greater heights. Now, the winds of expansion are blowing stronger, and some kites are soaring, but turbulence is increasing. The risk is rising that the winds will become too strong and volatile during the next year, and the kites will be grounded in 1989.

The consumer is no longer the lead kite, but better performance by exporters and business investment means that growth in the 1987–88 period will be faster than in the prior two years. Before ending, this longest peacetime expansion will create 18 million new jobs and reduce unemployment to the lowest level in nearly a decade. However, the winds of worsening inflation will carry interest rates to heights that threaten to halt the expansion.

Disparities Lessen in Continued Expansion

The disparity in economic performance—by sector, by region, and by industry—that was so pronounced in 1985 and 1986, began to narrow in 1987. In 1988, the sixth year of the current U.S. economic expansion, further recovery in the previously depressed sectors, regions and industries will be accompanied by further slowing of the previously strong segments of the economy. As this convergence of performance continues through the next year, however, the current expansion will become increasingly vulnerable to potential destabilizing shocks.

Dollar Fall to Aid Trade Turnaround

Contributing to an improvement in some depressed sectors of the U.S. economy will be a further decline in the value of the dollar, brought about by the continuation of a large trade deficit and the rise of inflation. Intensifying the effects of the substantial fall that has occurred over the past two and a half years, the further decline will at last bring about a drop in the U.S. trade and current-account deficits in 1988 and 1989 from their record levels of 1987. American manufacturing firms are the primary beneficiaries of the expansion of exports and the slowing of imports, although the agricultural sector will also benefit.

Further ahead, the odds of a recession

occurring in 1989 have risen substantially, and we do not expect this longest peacetime expansion to reach its seventh birthday. The primary reason for our forecast of a decline in economic activity in 1989 is an expectation that monetary policy will turn sufficiently restrictive after inflation passes the 6 percent rate in the second half of next year to produce a downturn.

Vulnerable Expansion

Although our most likely forecast is for continued growth of output at about a 3% rate in 1988, there is an increasing risk that some type of shock will throw the national economy into a nose dive. A sudden tightening of monetary policy to "save the dollar" on foreign exchange markets, another disruption of the supply of oil flowing from the Middle East, or a puncturing of one or more of the speculative bubbles in the world's major financial and real estate markets could bring an end to the expansion before 1989, even if in the middle of a presidential election year.

Debt, Debt, and More Debt

It is well known that federal budget deficits in the 1980s have pushed the national debt past the $2 trillion level. As the stock of debt has risen relative to national income and real interest rates have trended higher, the burden of servicing this mountain of debt has risen, with interest expense becoming the fastest-growing component of the federal budget. Not unrelated, the United States became a net debtor to the rest of the world in 1985 for the first time in over 70 years. By the time a new administration takes office in early 1989, the country will owe the rest of the world more than half a trillion dollars. Since we have been borrowing to finance consumption of imported goods, we have added greatly to foreigners' claims on our future output without adding to our ability to meet these obligations.

Within the country, the restructuring of corporate balance sheets — sometimes as a result of and sometimes to head off leveraged buy-outs — has added significantly to the debt-service burden of the corporate sector. Furthermore, the consumer-spending-led expansion of 1983–86 resulted in net consumer indebtedness rising to a record share of personal income.

While the existing levels of debt incurred by the various sectors of the U.S. economy are still serviceable by a $5-trillion-dollar economy, the trends are not encouraging. The United States has demonstrated that it has no fiscal discipline and, consequently, is unlikely to achieve and maintain noninflationary monetary discipline. As the world's *numéraire* and reserve-currency country, and now also as the biggest debtor, the temptation to inflate away the real obligations of debtors is considerable. Our forecast includes an increase of inflation from about 4.8% in 1987 to 5.5% in 1988 and 6.2% in 1989. We expect that once the 6% threshold has been reached, the monetary authorities will adopt a restrictive monetary policy, even at the expense of a relatively mild recession.

On an international scale, the effects of a U.S. recession in 1989 are expected to be less severe than the last recession, primarily because other major countries will have both stronger financial positions and lower rates of inflation than in the United States. Although some of the other industrial countries may thus avoid a recession, the combination of higher interest rates and slower growth in world trade is likely to adversely affect the developing-country debt situation.

October 14, 1987

The current economic expansion, the longest in U.S. peacetime history, is expected to continue through 1988 and into the first part of 1989. Our forecast is for real GNP to increase 3.0% in 1988 on a fourth-quarter-over-fourth-quarter basis, following a 3.4% gain in 1987. Next year's overall growth will encompass a continued, but smaller, divergence in the performance of different sectors, regions, and industries. We expect U.S. manufacturing to register further gains in 1988.

The major risk of an economic downdraft will come from inflation. We believe that a 6% inflation rate by the end of 1988 will trigger a tightening of monetary policy by early 1989. A subsequent climb in interest rates will send the most interest-sensitive sectors into a brief tailspin, with a general descent of the economy by the middle of 1989. Inflation and interest rates will then drift lower as the decade ends.

Economic Policy—Support and Threat to Expansion

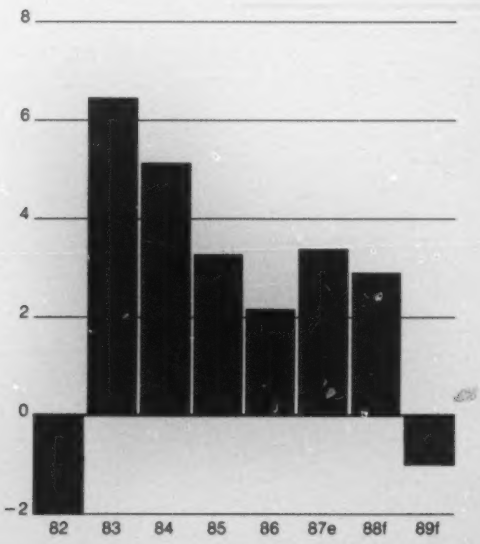
Although both fiscal and monetary policies have contributed to the current upswing, they have also released a number of forces that make this expansion increasingly vulnerable. The inability to curb federal spending sufficiently has resulted in large deficits. Rapid money growth has fostered further obstacles of rising inflation and interest rates.

Fiscal Policy Adrift

The deficit reduction in fiscal 1987 to approximately $160 billion from a record $221 billion in the prior year will provide only temporary relief. About $35 billion of the decline was due to one-time factors: (1) revenue from sales of capital assets in late 1986 before tax reform was implemented; (2) overwithholding of taxes in 1987; (3) deferral of spending from fiscal 1987 to 1988 (e.g., a one-day delay of the military payday); and (4) asset sales.

We assume that federal spending will hold at about 23% of GNP during fiscal years 1987 through 1989. Our forecast is for revenues to equal about 19% of GNP during that period. The Reagan Administration's initial plan was to balance the budget with both outlays and revenues equal to 19% of the economy. While the revenue goal was met, the spending goal was not. The gap between revenue and spending in our projection would produce

Real GNP in Record-Long Expansion
(Percent change, 4th quarter to 4th quarter)



a deficit of $182 billion in fiscal 1988 and $202 billion in fiscal 1989. The persistence of deficits of this magnitude will push the total amount of federal debt outstanding to the $2.9 trillion mark by the end of 1989, with publicly-held debt equal to about 40% of GNP. An "anti-inflation" income-tax surcharge is a possibility for 1989, which should be kept in mind, but is only a low probability. Higher domestic interest rates and, especially in 1988, inflationary monetization of the debt are likely to be the primary methods of financing higher rates of federal spending.

Monetary Policy—Facing Head Winds

The Federal Reserve will be buffeted from a number of directions in 1988 and 1989. The appointment of Alan Greenspan as Chairman of the Board of Governors will have several implications for monetary policy: (1) Mr. Greenspan will want to establish and maintain his credibility as "tough on inflation" to both the domestic and international markets. (2) The new Chairman will probably not want to appear politically bound to the Republicans in 1988, but he also will not want the Federal Reserve to be blamed for an adverse turn in the economy. (3) In the past, Mr. Greenspan has been a "hard money" man. He has advocated a fixed exchange-rate system anchored by gold, although he realizes that such a program is unrealistic at this time. (4) The Federal Reserve could begin to pay more attention to growth of the monetary aggregates. Because Mr. Greenspan does not believe the Federal Reserve can anticipate changes in the demand for money, the U.S. central bank could advocate steadier growth in the monetary aggregates and less fine tuning.

Monetary policy was highly expansive in 1985 and 1986. Growth of the monetary base (currency plus reserves) was 8.8% in 1985 and 9.7% in 1986. This rapid monetary growth was tolerated for several reasons: (1) Lower inflation and interest rates increased the quantity of money demanded. (2) Overall production, as measured by real GNP, was growing less rapidly than desired. (3) Parts of the U.S. economy remained acutely depressed. (4) Inflation was not a concern.

By 1987, however, the markets were beginning to realize the ultimate impact of the move toward reflation in the United States. The dollar dropped further on foreign exchange markets, gold prices soared, and bond prices plummeted. In response to adverse events in the spring of 1987, reserve growth was dampened; the discount rate was raised in September. Our assumption is that for 1987 as a whole, monetary-base growth will have moderated but will still total about 7.6% (fourth quarter to fourth quarter), followed by a rise of 7.0% in 1988. Given an expected pickup in velocity, monetary policy should be sufficiently expansive to accommodate continuation of the economic expansion through 1988.

Our forecast assumes that a rise in inflation to the 6% level by the end of 1988 will precipitate a significant tightening of monetary policy by early 1989, with monetary base growth slowing to less than 5% for the total year. This Federal Reserve action will end the record peacetime expansion, but will be the consequence of efforts to prevent inflation from moving to even higher levels than in our forecast.

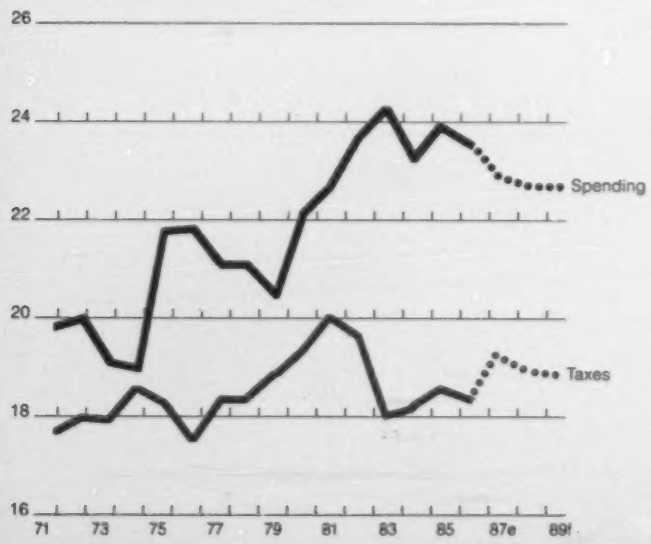
Economic Growth—Upswings, Crosscurrents, and Downdrafts

The U.S. economy is in its longest expansion in peacetime history, or at least as far back as the 1850s, when reliable tracking of American business cycles began. November 1987 will mark the fifth anniversary of this upward phase.

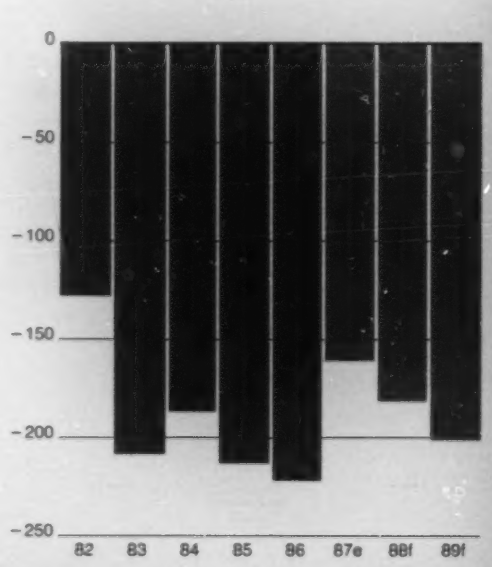
The current upswing has been marked not only by its longevity, but also by its disparity. While some industries and regions have continued to prosper, others are only now beginning to see signs of improvement from depressed conditions. Our forecast is that this divergence will continue to diminish in 1988 since the manufacturing sector is already picking up and agriculture, energy, and other commodity sectors have passed their low points.

We forecast that U.S. production, as measured by real GNP, will advance 3.0%

Spending-Revenue Gap to Persist
(Federal spending and taxes as percent of GNP, fiscal years)



More Large Federal Deficits
(Billions of dollars, fiscal years)



in 1988 (fourth quarter to fourth quarter), following an estimated gain of 3.4% in 1987. This average growth of 3.2% for the two years will compare with the average 2.8% gain in the prior two years, 1985 and 1986.

Shifting Winds

The U.S. economy is experiencing a change in its sources of strength and weakness in the 1987–88 period compared with 1985–86. The consumer was the unquestionable driving force in the earlier two-year period. In fact, between the end of 1984 and 1986, the growth of consumer spending in real terms substantially exceeded the growth of U.S. production, a phenomenon made possible by the strong rise in imports.

A major reordering of the forces behind economic growth is taking place in 1987–88. The consumer, while still important, is no longer the dominating force. We estimate that consumer spending will account for only about 45% of the growth in real GNP between the end of 1986 and the end of 1988. This will be less than one half its contribution in the prior two years. Consumer spending will be supported in 1988 by further reductions in tax rates to 15% and 28% for most individuals and also by the payment of tax refunds caused by overwithholding in 1987.

Consumers, however, are likely to continue to moderate their assumption of new debt, especially with the continued phase-out of deductibility of interest payments. Auto sales, for example, will be off their previous highs of over 11 million units in 1985 and 1986. We estimate sales of 10.3 million cars in 1987 and project sales of 10.5 million for 1988. Most of the reduction from the 1985–86 peaks will be in domestically produced cars. Our forecast indicates import sales of 3.0 million for both 1987 and 1988. Although imports are being hampered by the dollar's decline, their quality image remains high. Foreign sales are being helped by the success of cars from South Korea.

Housing will be subtracting from economic growth in the current two-year period, with new housing starts moving down to an estimated 1.65 million units in 1987 and 1.56 million in 1988 from an average of 1.77 million units in 1985–86. Single-family construction is being dampened by the upturn in mortgage rates, while high vacancy rates and loss of tax advantages have pushed multi-family construction to a much lower level.

Government spending from different levels (federal, state, and local) will continue as a source of rising demand for goods and services in the near-term period. Its relative importance, however, will diminish, partly because of slower growth in defense outlays.

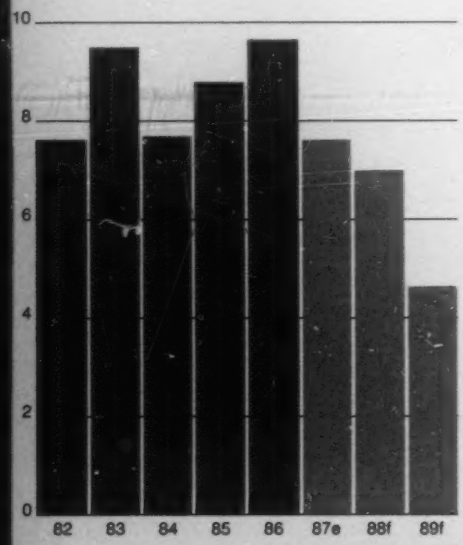
The major change in growth patterns is the reemergence of capital spending, net exports, and inventories as sources of strength in the 1987–88 period. While nonresidential building will continue to be soft, the worst of the downturn is probably over. Energy companies are beginning to revive some exploration and drilling activity. Interest is being expressed in building industrial warehouses and modernizing or constructing new manufacturing facilities. Office vacancy rates are likely, however, to remain high in most markets.

Plant and Equipment Spending

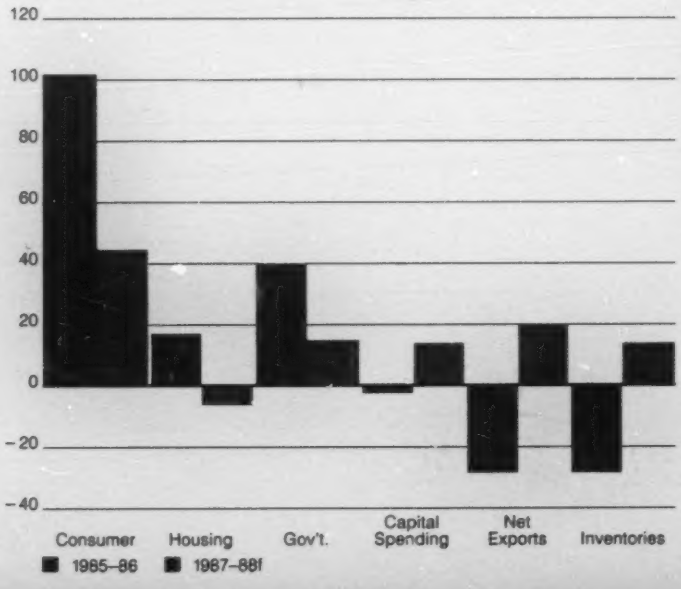
	Total	Annual Changes	
	$ billions	% Nominal	% Real
1982	367	−0.7	−7.2
1983	357	−2.7	−1.5
1984	416	16.6	17.7
1985	443	6.4	6.8
1986	437	−1.3	−2.3
1987e	**439**	**0.5**	**−1.0**
1988f	**487**	**10.9**	**6.6**
1989f	**513**	**5.3**	**0.2**

Investment in new equipment started to pick up in 1987 and should soar in 1988. Our forecast is for a real gain of approximately 8%, with strong demand in such areas as computers, semiconductors, and machine tools. Stronger sales, improved profit prospects, and continued efforts to raise productivity are likely to support these gains. The reduction in the corpo-

Monetary Policy Accommodative Until 1989
(Percent change in monetary base, 4th quarter to 4th quarter)



Sectoral Contributions to Growth Shift
(Percent share of two-year real GNP growth, fourth quarter data)



rate tax rate to 34% will also be fully implemented in 1988. (The tax-rate cut was formally implemented on July 1, 1987, but calendar-year companies faced a blended rate of about 40% for the year.)

The dollar's decline on foreign-exchange markets will cause the U.S. foreign-trade sector to make a major positive contribution to economic growth during the 1987–88 period. Our estimate is that export growth from the end of 1986 to the end of 1988 will average about 9% in real terms, while the increase in imports will be only slightly more than 2%.

Moderate inventory building should also be a source of growth during this two-year period, as business firms respond to improving sales and orders. Increasing backlogs will add to work-in-process, and firms may step up orders of raw materials both to avoid future price increases and to prevent slowdowns in delivery schedules.

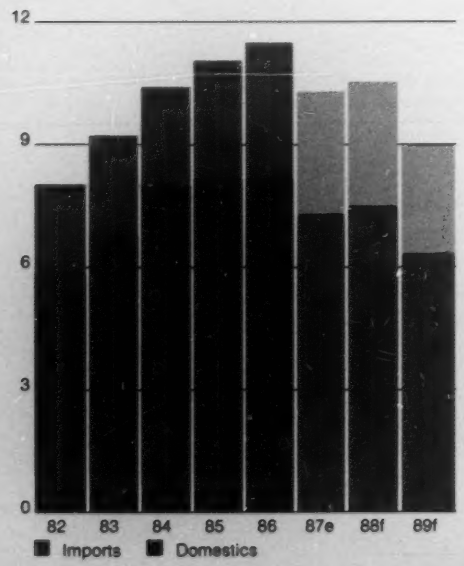
A major change in the U.S. economy during the 1987–88 period is the revival in competitiveness of American manufacturing. This has been achieved partly as a result of industry restructuring and a new focus on efficiency, but also largely because of the dollar's decline in foreign-exchange markets. U.S. manufacturers will see further gains in 1988 because of both an improvement in export performance and their ability to secure a larger share of domestic sales and orders.

Major Economic Indicators — Quarterly

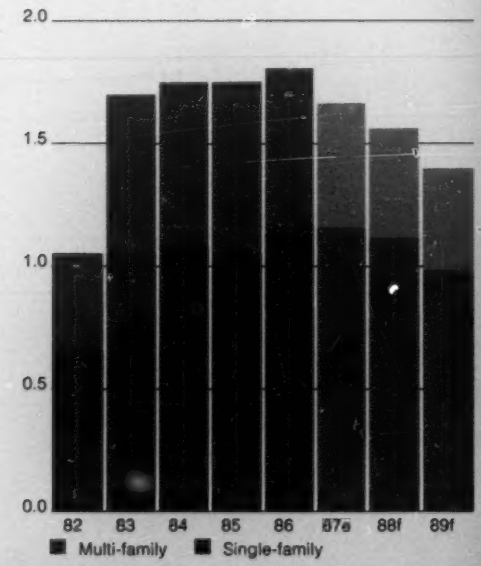
	1987				1988			
	I	II	III	IV	I	II	III	IV
	Actual				Forecast			
Gross National Product (billions of $, annual rate)	4377.7	4445.1	4524.4	4615.1	4712.2	4807.7	4905.1	5004.3
% Change, annual rate	8.6	6.3	7.3	8.3	8.7	8.4	8.4	8.3
Real GNP (billions of 1982 $, a.r.)	3772.2	3795.3	3824.6	3858.6	3894.7	3925.5	3952.7	3976.2
% Change, annual rate	4.4	2.5	3.1	3.6	3.8	3.2	2.8	2.4
Real Final Domestic Sales (billions of 1982 $, a.r.)	3859.7	3888.9	3934.2	3966.7	3992.9	4017.3	4038.0	4061.2
% Change, annual rate	−3.8	3.1	4.7	3.3	2.7	2.5	2.1	2.3
Real Change in Inventories (billions of 1982 $, a.r.)	47.6	39.0	16.0	10.0	17.0	20.0	23.0	18.0
GNP Deflator (1982 = 100)	116.1	117.1	118.3	119.6	121.0	122.5	124.1	125.9
% Change, annual rate	4.2	3.5	3.9	4.5	4.7	5.0	5.4	5.8
Consumer Price Index (1967 = 100)	335.0	339.0	342.4	346.5	350.8	355.4	360.2	365.5
% Change, annual rate	5.3	4.9	4.1	4.9	5.0	5.3	5.6	6.0
Auto Sales (millions, annual rate)	9.5	10.0	11.7	10.1	10.5	10.5	10.8	10.1
Housing Starts (millions, annual rate)	1.79	1.62	1.61	1.60	1.60	1.58	1.57	1.50
Industrial Production (1977 = 100)	127.0	128.3	130.6	132.1	133.8	135.2	136.4	137.3
% Change, annual rate	3.2	4.2	7.4	4.7	5.1	4.4	3.5	2.8
Nonfarm Employment (millions)	101.1	101.7	102.3	103.1	103.8	104.5	105.2	105.8
Unemployment Rate, All Workers (percent)	6.6	6.1	6.0	5.9	5.8	5.8	5.7	5.8
Corporate Operating Profits (billions of $, annual rate)	294.0	296.8	298.0	300.0	305.0	307.0	308.0	309.0
% Change over year ago	2.1	5.1	4.1	6.7	3.7	3.5	3.4	3.0
Net Cash Flow (billions of $, annual rate)	378.7	384.6	386.5	391.0	393.0	397.0	398.0	399.0
% Change over year ago	3.9	5.9	4.2	3.8	3.8	3.2	3.0	2.0
Monetary Base (billions of $, a.r.)	243.7	247.8	250.8	254.8	259.5	263.3	267.8	272.7
% Change, annual rate	11.8	7.0	5.0	6.5	7.5	6.0	7.0	7.5

NOTE: All quarterly series are seasonally adjusted; % change, annual rate calculated from prior quarter; calculations based on

Auto Sales Fall from Peaks
(Millions of units)



Housing Starts Move Lower
(Millions of units)



1989 I	1989 II	1989 III	1989 IV	1987	% Change '87/'86	1988	% Change '88/'87	1989	% Change '89/'88
Forecast				Estimate		Forecast			
5090.4	5167.5	5203.5	5250.8	4615.1	7.6	5004.3	8.4	5250.8	4.9
7.1	6.2	2.8	3.7						
3986.1	3986.1	3955.9	3936.0	3858.6	3.4	3976.2	3.0	3936.0	−1.0
1.0	0.0	−3.0	−2.0						
4060.9	4064.3	4050.4	4020.9	3966.7	1.8	4061.2	2.4	4020.9	−1.0
0.0	0.3	−1.4	−2.9						
24.0	16.0	−7.0	−2.0	10.0	N/A	18.0	N/A	−2.0	N/A
127.7	129.6	131.5	133.4	119.6	4.1	125.9	5.2	133.4	6.0
6.0	6.2	6.0	5.8						
371.1	376.9	382.7	388.3	346.5	4.8	365.5	5.5	388.3	6.2
6.2	6.5	6.2	6.0						
9.6	9.3	8.7	8.5	10.3*	−9.8	10.5*	1.5	9.0*	−13.8
1.38	1.35	1.37	1.50	1.65*	−8.4	1.56*	−5.5	1.40*	−10.4
137.6	137.1	135.0	133.4	132.1	4.8	137.3	3.9	133.4	−2.8
0.7	−1.4	−5.9	−4.8						
106.3	106.6	106.5	106.3	103.1	2.7	105.8	2.6	106.3	0.5
6.0	6.2	6.6	7.0	5.9	N/A	5.8	N/A	7.0	N/A
309.0	306.0	302.0	299.0	300.0	6.7	309.0	3.0	299.0	−3.2
1.3	−0.3	−1.9	−3.2						
399.0	396.0	392.0	389.0	391.0	3.8	399.0	2.0	389.0	−2.5
1.5	−0.3	−1.5	−2.5						
276.0	277.4	280.8	285.6	254.8	7.6	272.7	7.0	285.6	4.7
5.0	2.0	5.0	7.0						

unrounded data; a.r. = annual rate. *Annual total; N/A = not applicable.

Spring 1989—Adverse Conditions

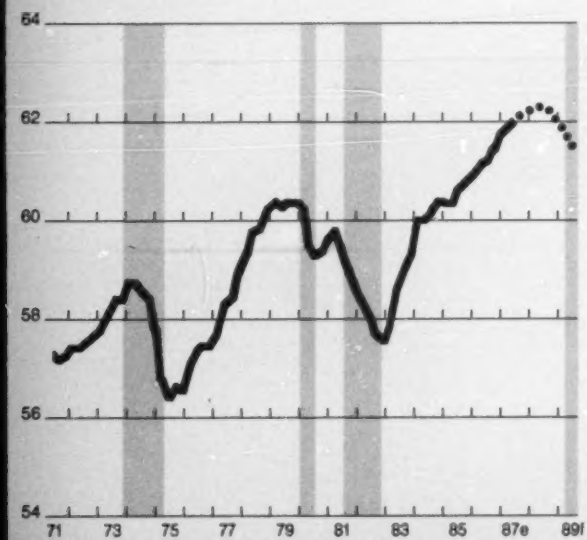
Economic expansions do not end just because they have reached a certain age, but rather are terminated by external shocks or policy changes. Our forecast is that the culmination of expansive fiscal and monetary policies will be an increase in inflation to unacceptable levels by the end of 1988. A tightening of Federal Reserve policy by early 1989 is likely to bring an end to the expansion by the second quarter of that year. We anticipate no growth in real GNP in the spring quarter of 1989, followed by a 2.5% annual rate of decline in the second half.

Labor Markets—Full Employment?

By the time the current expansion ends in the first half of 1989, we forecast that a total of almost 18 million jobs will have been created during the more than six years of growth. This trend has been accompanied by a decline in the unemployment rate from nearly 11% in late 1982 to a projected low of about 5.7% (including the military) by the summer of 1988. The proportion of the working-age population with jobs is forecast to climb to an all-time high of 62.5% by mid 1988.

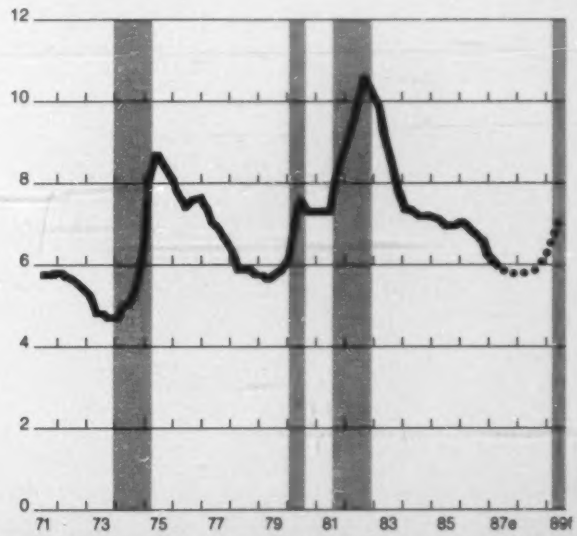
The U.S. economy is already probably close to full employment in terms of labor markets. Further declines toward the 5.5% level can be expected to trigger larger increases in wages. While some regions

Reaching Full Employment
(Percent of population 16 and over holding jobs, quarterly averages)



Note: Shaded areas indicate recession periods.

Jobless Rate Down Until 1989
(Unemployment as percent of total labor force, including military, quarterly averages)



Note: Shaded areas indicate recession periods.

have considerable slack, states such as Massachusetts, with a jobless rate of about 3% in mid 1987, are experiencing tightness in their labor markets.

With an ending of the business expansion as the decade also ends, we expect the jobless rate to rise in the second half of 1989. Firms are likely to respond relatively quickly to hold down costs by laying off workers, as they did in the last recession. Consequently, we project a climb in the jobless rate to 7% by December 1989.

"Misery Index" and the 1988 Election

Once every four years, political aspirants pay special attention to the actual and perceived state of the economy. One summary measure is the "misery index," comprising the sum of the rates of unemployment and inflation. We expect this rate will average about 11% in 1988 (5.8% unemployment and 5.1% inflation). In the election years since 1960, this index has ranged from a low of about 6% in 1964 (the retention of an incumbent administration, with the election of President Johnson) to over 20% in 1980 (defeat of the incumbent administration of President Carter). The state of the economy is, of course, only one element in voter decisions, but it is an important factor.

Inflation—Stronger Winds

The past trend of rapid monetary growth is expected to push inflation higher in the latter part of 1987 and in 1988 and 1989. We believe that 1986, a year when the plunge in oil prices limited the rise in consumer prices to only 1.3% on a fourth-quarter-to-fourth-quarter basis, could mark the low point of inflation for the rest of this century.

We assume that oil prices, in terms of the West Texas Intermediate benchmark, will average between $16.50 and $18.50 per barrel in the 1988–89 period, with fluctuations outside that range. Barring a major outbreak of war in the Middle East, difficulty for OPEC to restrict output and the increased importance of non-OPEC suppliers are likely to restrain energy prices. At the same time, we do not anticipate during the forecast period another collapse in oil prices such as that experienced in 1986.

The legacy of large federal budget deficits, expansive monetary growth, and a declining dollar internationally is higher inflation. The first effects of the attempts originating in early 1985 to reflate the U.S. economy have been mostly positive in terms of higher output and employment. Firms initially take advantage of increased product demand to expand production. As the economy progresses through 1988 more of the impact of rising demand will be translated into higher prices.

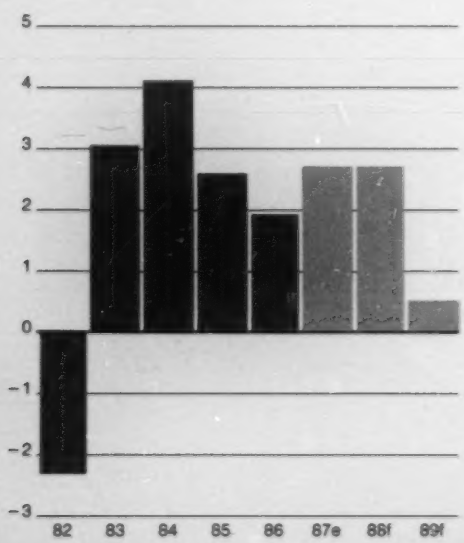
Just as the dollar's previous strength on foreign-exchange markets was a key factor restraining inflation earlier in the expansion, its steep descent since 1985 will drive many prices higher during the next two years. We anticipate that prices of imported goods, excluding energy, will post year-end to year-end increases of approximately 10% during each of the three years, 1987–89.

Wages, which have been subdued in the most recent years, are expected to start climbing more rapidly. Many companies will no longer be able to exact give-backs from their employees, but will instead face demands for increased salaries and other benefits. A turnaround for many manufacturing firms, better profits, more rapidly rising consumer prices, and the move toward full employment will produce larger wage gains. An increase in the minimum wage is also likely to be phased in. Consequently, our forecast is that average employee costs will register a year-end to year-end increase of 3.8% in 1987, with an acceleration to 5.5% by December 1988 and 6.0% by the end of 1989.

Consumer prices will advance 4.8% in 1987 (fourth quarter to fourth quarter) and 5.5% in 1988. Analogous to the sequence that the first impact of stimulative economic policy is on the real side, the initial effects of more restrictive monetary policy in 1989 will be on production and employment. Various contracts governing wages, rents and other prices, as well as the "stickiness" of inflation expectations, are likely to keep inflation at 6% or above

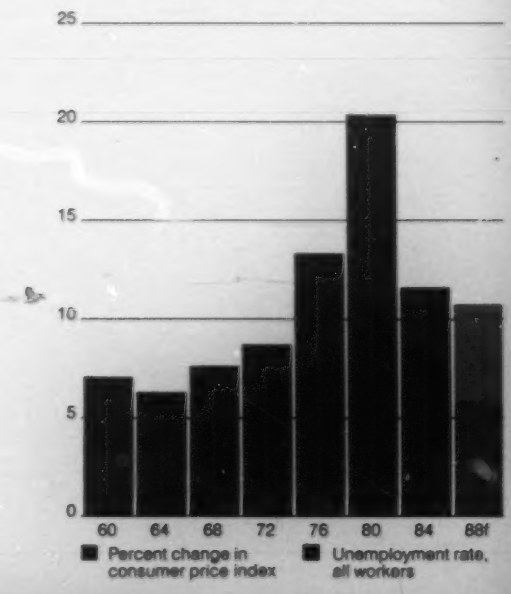
18 Million New Jobs

(Changes in nonfarm employment in millions, 4th quarter to 4th quarter)



Misery Index in Election Years

(Unemployment rate + inflation rate, annual averages)



Forecast of Interest Rates

	1987				1988				1989			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Short-Term	Actual				Forecast							
Fed Funds (Overnight)	6.22	6.65	6.80	7.25	7.45	7.70	7.90	8.25	9.00	9.75	9.35	9.05
Treasury Bills (3 month)[1]	5.54	5.66	6.05	6.40	6.60	6.85	7.10	7.40	8.10	8.90	8.50	8.25
CDs (3 month, Secondary)	6.05	6.82	6.95	7.40	7.60	7.80	8.05	8.35	9.00	9.75	9.30	9.05
Eurodollar (3 month)	6.26	7.03	7.10	7.57	7.79	8.01	8.28	8.60	9.25	9.98	9.52	9.25
Prime Rate	7.50	8.05	8.39	8.90	9.15	9.40	9.60	9.90	10.50	11.25	11.00	10.70
Long-Term												
U.S. Government Bonds (30 yrs)[2]	7.49	8.53	9.00	9.00	9.10	9.25	9.35	9.50	9.75	10.00	9.65	9.25
Corporate Aaa (Moody's)	8.37	9.17	9.75	9.75	9.90	10.05	10.15	10.25	10.50	10.75	10.40	10.00
Mortgage Rate (Fixed)[3]	9.14	10.32	10.55	10.85	10.95	11.15	11.30	11.50	11.75	12.00	11.65	11.25

(1) Bank discount basis. (2) Yields adjusted to constant maturities. (3) Contract rates on first mortgages, conventional market.

through 1989. We look for consumer prices by the end of 1989 to register a year-over-year increase of 6.2%.

Financial Markets—Calm or Stormy?

The low points for both inflation and interest rates have already been passed for this business expansion. Five major factors can be expected to push short-term interest rates upward during the course of 1988: (1) rising inflation; (2) stronger economic growth; (3) higher credit demand from business; (4) increases in the federal budget deficit; and (5) further declines in the dollar's foreign-exchange value.

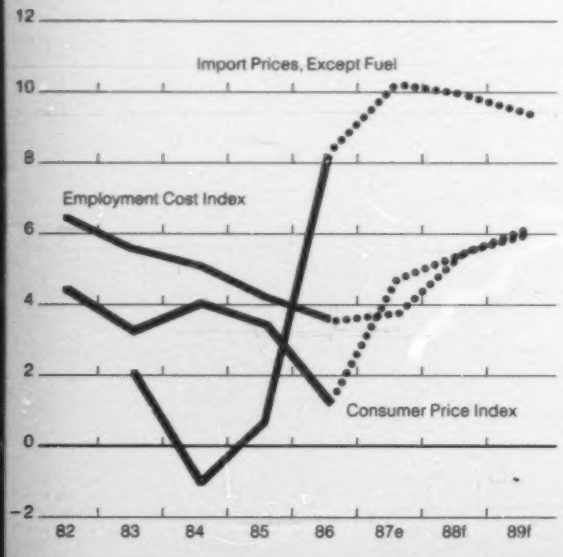
Higher inflation will be incorporated in short-term expectations, while stronger economic growth will cause financial markets to anticipate a tightening on the part of the Federal Reserve. Increases in short-term borrowing by both private business and the federal government will contribute to demand pressures in the financial market. Worries abroad about further weakness in the dollar will imply higher real interest rates in the United States to attract foreign funds.

From the fourth quarter of 1987 to the final quarter of 1988, we anticipate a rise in most short-term interest rates of about one percentage point. This would put the three-month Treasury-bill rate at approximately 7.40% in the fourth quarter of next year, with the prime rate likely to reach 10% by the end of December 1988.

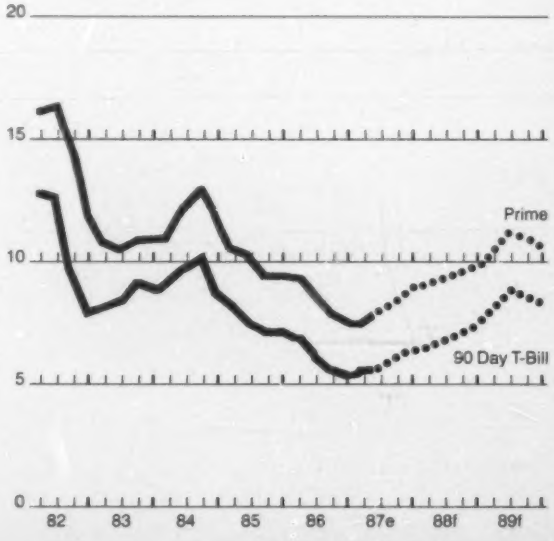
We do not expect the Federal Reserve to be the primary force pushing short-term rates upward during most of 1988. Instead, we anticipate that it will "follow the market" upward, letting the federal-funds rate rise along with short-term market rates.

This picture is expected to change by late 1988 or early 1989. Faced with an unacceptably high rate of inflation, our assumption is that the Federal Reserve will restrain reserve growth, causing the federal-funds rate to rise from an average of 8.25% in the fourth quarter of 1988 to 9.75% in the second quarter of 1989. Other short-term interest rates are also likely to rise approximately 1.5 percentage points during the first part of 1989 to a peak that spring. With the economy falling into recession, interest rates are then likely to

Wages and Import Prices Contribute to Inflation
(Percent changes, 4th quarter to 4th quarter)



Short-Term Interest Rates Rise into 1989
(Percent, quarterly averages)



drop as much as three quarters of a percentage point in the second half of 1989.

Bond Markets—More Turbulence?
The long-term bond market has exhibited much nervousness during 1987, especially in April and May and again in August and September in response to the dollar's weakness. In equilibrium, the yield on long-term Treasury bonds comprises three components: (1) a real rate of return, based in part on the underlying productivity of capital in the economy; (2) a factor reflecting the expected long-run rate of inflation to compensate investors for expected losses in purchasing power; and (3) a risk premium to cover the uncertainty surrounding inflationary expectations. Non-Treasury securities also include a premium to compensate for default risk.

The increase in 30-year government bond yields to 9% and above at certain points in 1987 from a general level of 7.5% through much of 1986 underscored the striking change in financial markets. The expected long-run rate of inflation has probably increased from around 4% to over 5%, which would justify a rise in long-term rates of about one percentage point to approximately 8.5%. The recent rise in long-term rates to over 9% reflected heightened uncertainty regarding several factors: (1) the ultimate impact of previous rapid monetary expansion; (2) the foreign exchange value of the dollar; (3) oil prices; (4) the federal budget deficit; (5) Federal Reserve policy under a new chairman; and (6) growth of the net foreign indebtedness position of the United States. The increase in the discount rate was an effort to subdue some of these concerns and uncertainty about inflation.

The yield on 30-year government bonds is likely to remain at 9% or above through the end of 1987 and 1988. This will reflect a real rate of return on capital of about 3%, a long-run expected rate of inflation of about 5%, and a risk premium of 1% or more. Some rise in long-term yields is likely to accompany the increase in short-term rates during 1988, but most of the climb probably has already taken place in 1987. Our forecast shows a rise in long-term interest rates of about one-half percentage point between the fourth quarters of 1987 and 1988, compared with a full percentage point increase for short-term rates. This forecast places 30-year government bond yields at about 9.50% at the end of 1988, with yields on corporate Aaa bonds at 10.25%.

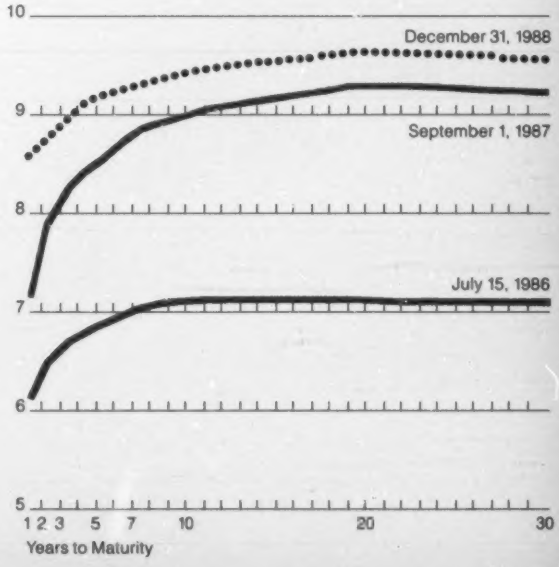
A flattening of the yield curve should therefore take place during 1988, with short-term interest rates rising relative to long-term rates. Further flattening will take place in the first half of 1989, as the Federal Reserve tightens reserve growth and short-term rates rise more sharply. The yield curve could even temporarily invert in the first half of 1989, with short-term rates exceeding long-term rates.

Our forecast has the yield on 30-year government bonds peaking at about 10.0% in the second quarter of 1989 and then easing to 9.25% at year-end. The yield on Aaa corporate bonds would peak at about 10.75% in the second quarter of 1989 and ease to 10.0% by the end of that year.

Because savings and loan associations and other thrift institutions have become more responsive to interest-rate risk, with many of them no longer even retaining fixed-rate mortgages in their portfolios, long-term fixed mortgage rates have become more sensitive to other long-term rates. We expect interest rates on conventional fixed-rate mortgages to move from an average of about 10.85% in the fourth quarter of 1987 to 11.50% in the final quarter of 1988. These rates are then likely to rise to a peak of about 12.0% in the first half of 1989, before easing to about 11.25% by the close of the year. More attractive rates on adjustable-rate mortgages are likely to make such mortgages the dominant instrument for home financing during the next two years.

Long-Term Interest Rates Remain High
(Percent, quarterly averages)

Yield Curve, After Upward Shift, to Flatten
(Yields on U.S. govt. securities, percent)



Regional Economies

As the present economic expansion enters its sixth year, there is evidence of a shift in regional growth patterns. Stable or increasing prices for oil, livestock, lumber and metals, together with projected increases in manufacturing output, are already starting to be reflected in improved growth for states dependent on agriculture and energy as well as those in the industrial heartland. As this shift continues, states reliant on manufacturing are expected to account for an increasing proportion of total job growth during the forecast period. Those states that accounted for the greatest job growth during 1985–86 should account for a smaller proportion of the nation's total gain during 1987–88.

Nonfarm employment in the First Interstate Territory is expected to increase at an average annual rate of 1.7% during 1987–89. Nonfarm employment in California is forecast to grow faster than the nation in 1988, as it did in 1987.

Regional Disparities Continue but Are Beginning to Change

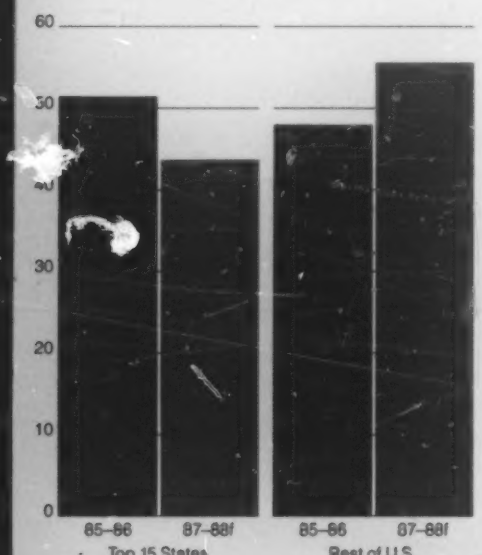
The national figures for unemployment, employment, and income represent an average including both fast and slow growth states. While the national average continues to move upward, subtle shifts are occurring in the state growth patterns underlying the national total.

Manufacturing States to Increase Share of Job Growth

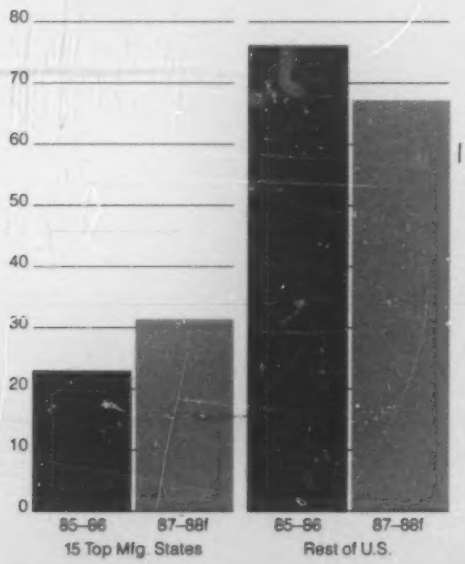
The near-depression conditions among oil and agricultural states juxtaposed with near boom conditions among the coastal states dominated the underlying growth patterns of the recent expansion years. Stable or rising commodity prices and the continued decline in the international value of the dollar, which will affect the nation's manufacturing sector, are two of several factors that will produce changes in the underlying state growth patterns over the next few years. States that previously experienced slow growth are expected to recover as the baton of growth generation is passed to different sectors.

The map on the next page illustrates the growth patterns of the recent past. It shows that the 15 fastest growing states, as measured by changes in employment for the 1985–86 period, were geographically concentrated on the east and west coasts. The "heartland" continued to be plagued

Share of 15 Fastest Growing States in Total Job Growth to Decline
(Percent of U.S. employment gains)



Manufacturing States to Capture Larger Share of Total Job Growth
(Percent of U.S. employment gains)



by the impact of falling commodity prices, particularly in agriculture and energy. Most of these states reached bottom in 1986. It will take several years, however, before some of the oil-producing states register positive growth.

The graph on page 11 showing job growth in the 15 top states (those illustrated in the map) reveals that, although these states accounted for 52% of the new jobs generated in the United States during 1985–86, they are expected to account for only 44% of new jobs during 1987–88. Expected growth in other states should make continued growth in the top 15 a smaller proportion of the total. As this process continues, states in addition to those on the coasts should begin to experience higher growth.

One of the sectors of transition will be manufacturing. The continued decline of the dollar is expected to result in increased manufacturing output for import-competing and export-producing industries. The graph on page 11 showing growth in the top 15 states for which manufacturing is a large proportion of total employment illustrates how these changes will affect state growth patterns. During the 1985–86 period, 15 manufacturing states accounted for 23% of the new jobs generated in the United States. With the expected strengthening in manufacturing output, these same states are expected to account for 32% of the jobs created during the 1987–88 period. Increased productivity in manufacturing, however, means that these states may raise their share of output by even more.

Are Disparities in Per Capita Income Increasing?

Personal income, in addition to employment, is a measure of state and regional growth. Per capita income in 1986 ranged from $19,600 in Connecticut to $9,716 in Mississippi. Connecticut's high per capita income in 1986 contributed to making New England the highest per capita income region in the nation, at 117% of the U.S. average. The Southeast, at 87% of the U.S. average, had the lowest per capita income.

Regional divergence in income remains an ongoing concern in analyzing regional trends. Is there evidence that regional income, which had been converging up to 1979, has started to diverge again in recent years? Careful analysis indicates that little divergence has occurred, particularly if the range in per capita income as a percentage of the U.S. average is considered.

Regional per capita income in 1986 varied from 87% to 117% of the U.S. average, a difference of 30 percentage points. Although New England's margin above the national average was higher in 1986 than in 1979, the Southeast was not as much below the national average as in 1979. In 1979, regional per capita income ranged from 85% to 114% of the U.S. average, a range of 29 percentage points. The difference between the two periods is minimal.

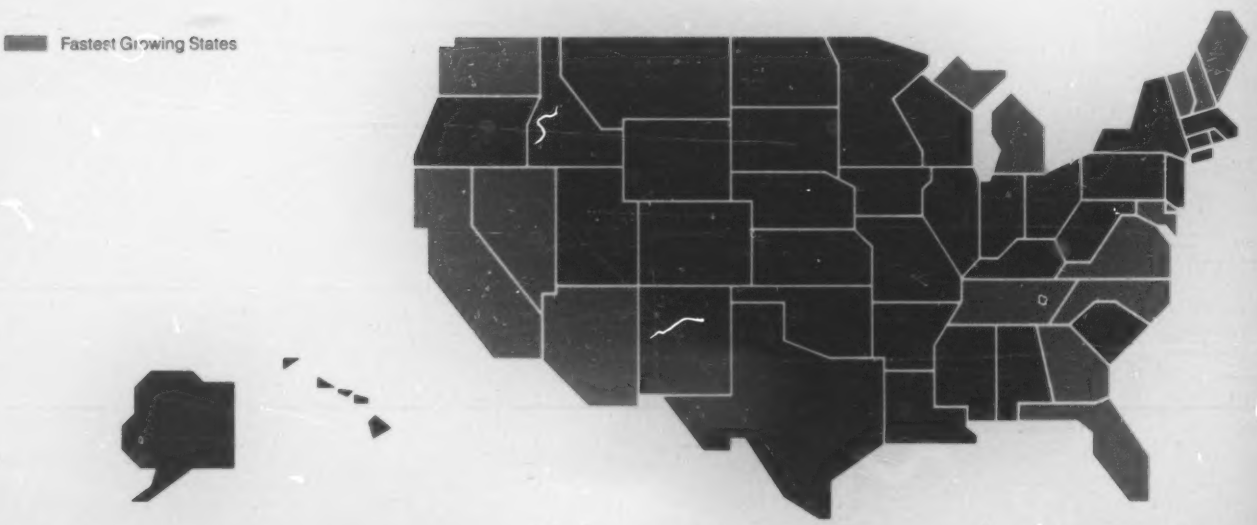
One of the reasons New England had per capita income 117% of the national average is because one state, Connecticut, had an unusually high per capita income in 1986. Without Connecticut, per capita income in New England would have been 101% of the U.S. average.

Federal Farm Subsidies Support Personal Income

State personal income in heavily agriculture-dependent states would have been much lower than it was in 1986 if producers had not received federal farm-subsidy payments. Federal payments, for example, contributed to the rapid 7.5% growth in personal income experienced in Montana in 1986. With this increase, Montana ranked just under Arizona, where income rose 7.6%, and above Nevada, where income increased 7.1%.

Farm-subsidy payments will continue to affect personal income in 1987, particularly in the plains states. For example, personal income increased 12% in North Dakota and 9% in Iowa during the first quarter of 1987, compared with the first quarter of 1986. These increases are directly attributable to advance subsidy payments on crops.

15 Highest Growth States Concentrated on Coasts
(Growth in nonfarm employment, 1985–86)



First Interstate Territory Growth Hit by Lower Oil Prices

During the four-year period, 1983–86, nonfarm employment in the FI Territory grew at an average annual rate of 2.7%, about the same as the nation. Employment in the Territory is expected to grow at an average annual rate of 1.7% during the 1987–89 period, somewhat below the 2.2% rate expected for the nation. Growth in the Territory dipped below that of the nation in 1986 when oil producing states such as Alaska, Montana, and Wyoming experienced declines in employment in response to major reductions in oil prices. Although most of these states experienced the worst of the downturn in 1986, it will take several years until the adjustment to lower oil prices reverberates through their economies. During this period, growth for the Territory will be slower than growth in the nation. The oil-producing states as a group, however, are expected to show positive growth by 1989, at which time the Territory is again expected to grow at a rate close to that of the nation.

The employment growth forecasts for the states comprising the FI Territory are shown in the accompanying graph. Many of the forces that have shaped growth of the Territory during the present expansion will continue to do so through the forecast period, particularly commodity price movements and the degree of state economic diversity. The graph on page 14 on commodity prices shows 1987 as a year of price increases in several key commodity groups. While increased commodity prices can be part of increased inflation, they also contribute to employment growth in those states with economies dependent upon minerals, agriculture, or oil and are a major factor behind the forecasted employment growth for 1988.

Oil

As the graph on commodity prices shows, oil prices have increased above their low 1986 average level and there is evidence of increased drilling activity, particularly offshore in the Gulf and in existing fields. Most of the Territory oil-producing states will show declines in employment in 1987, as they continue to assimilate the 1986 price changes. The greatest decline is expected to occur in Alaska, where employment is estimated to be down 4%. For a number of the oil-producing states, however, declines will not be as severe as those experienced in 1986.

Other Commodities

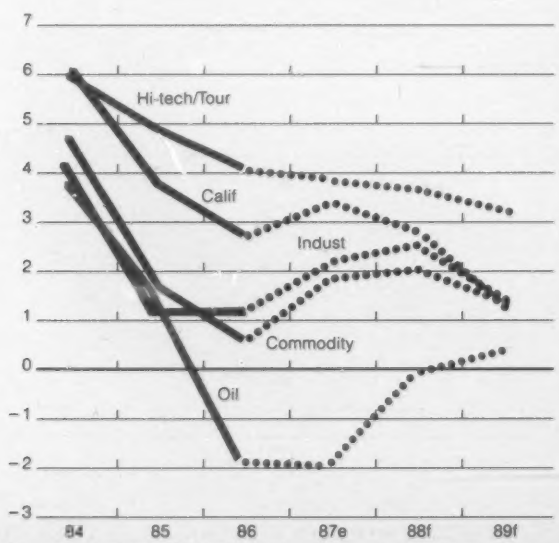
The first half of 1987 has been marked by improved prospects for states with economies dependent on agriculture, such as Iowa. Production costs, particularly for manufactured inputs and feeds, are lower than in 1986; farmland values appear to be stabilizing; and receipts for livestock and government payments are up and should partially offset reductions in crop receipts. Hog prices in June, at $61/hundredweight, were a record high. These price increases are particularly good news for states such as Wisconsin, Oklahoma, and Iowa, where livestock accounted for 82%, 73%, and 55% of farm cash receipts, respectively, in 1986. Better farm conditions should also contribute to growth in states such as Oklahoma and North Dakota, which have large agricultural sectors in addition to dependence on oil.

Metal prices have been moving up in recent months and, if this trend continues, increases in mining employment can be expected. Mining employment in Utah rose 16% in July over year-earlier levels, primarily due to the reopening of the Kennecott Minerals Corporation's Utah operation. Increased silver prices may lead to a rise in mining employment in states such as Idaho.

Industrial States

Employment in manufacturing was up 0.1% for the First Interstate Territory in the first half of 1987 in comparison to year-earlier levels. This compares with a 0.7% decrease in manufacturing employment for the Territory in 1986. The increase partly reflects the impact of the declining dollar on expanding output for import-competing and export-producing industries. The table on the next page shows that 10 Territory states experienced

Disparity in Employment Trends to Diminish
(Annual percent changes in employment for FI Territory states)



Oil = AK,LA,MT,ND,OK,TX,WY
Industrial = IN,WI
Commodity = CO,ID,NM,UT,IA,OR
High-tech/tourism = AZ,NV,HI,WA,DC

Manufacturing Employment Growth

	1986		1987—First Half	
	Thousands	% Change	Thousands	% Change from Year Earlier
Alaska	12	2.5	11	4.0
Arizona	184	1.4	184	1.2
California	2,064	−0.6	2,064	0.7
Colorado	185	−3.6	183	−9.7
Hawaii	22	0.9	22	−1.1
Idaho	52	−4.6	53	3.4
Indiana	603	−1.1	602	−0.3
Iowa	201	−1.7	207	2.6
Montana	21	−2.7	21	2.1
Nevada	22	1.4	23	5.3
New Mexico	38	0.5	38	1.8
North Dakota	15	0.0	15	4.8
Oklahoma	163	−5.3	158	−4.5
Oregon	197	−1.3	194	0.5
Utah	92	−2.1	91	−1.4
Washington	304	2.9	305	1.2
Wisconsin	513	−0.3	511	0.7
Wyoming	8	0.0	8	0.9
First Interstate Territory	4,697	−0.7	4,692	0.1
U.S.	18,994	−1.4	18,936	−0.2

Note: All calculations based on unrounded data

declines in 1986, while only five did in the first half of 1987. The largest increase in manufacturing jobs during the first half of 1987 occurred in California (2.1 million), followed by Indiana (602,000), Wisconsin (511,000), Washington (305,000), and Iowa (207,000).

The continued decline in the value of the dollar should make manufacturing one of the growth sectors during the forecast period. Indiana, for example, is forecast to have employment growth above the U.S. average during 1987 and 1988.

High-Tech and Tourism

States with economies dependent upon high technology (high-tech) and tourism will continue to be high-growth states during the forecast period. The low international value of the dollar will continue to make the United States, particularly states on the Pacific Rim, attractive to Asian tourists.

The computer industry is expected to show continued moderate growth in the high-tech states. Other sources of growth include office-computing equipment, communications equipment, aircraft, guided missiles, and space vehicles.

Changes in defense spending remain potential clouds on the high-tech horizon. The table on the facing page illustrates the number of jobs generated by contract expenditures during 1986. It shows that Louisiana, California, Indiana, Arizona, and Texas have the largest proportion of jobs attributable to defense-contract expenditures and would be the most affected by any changes.

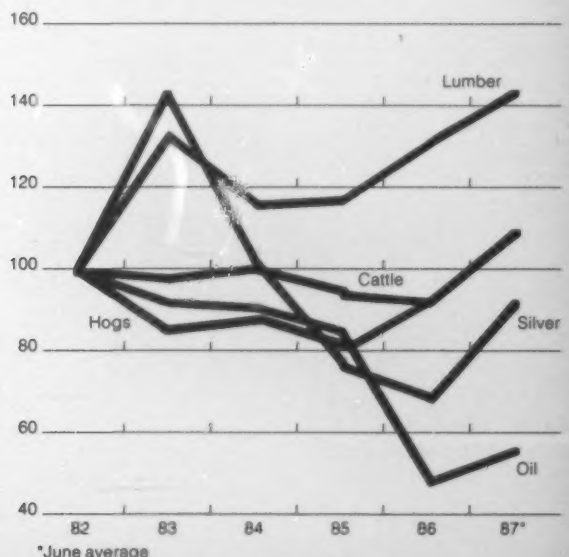
California

Strong Growth Trends

California's economic performance has improved significantly in 1987. Nonfarm payroll employment increased an estimated 3.5% in 1987, one percentage point faster than the national average, and well ahead of the gain in 1986 of 2.7%. Personal income growth was also higher in the state than the nation in real as well as nominal terms; California's inflation rate has been running somewhat higher than the nation's, a trend expected to continue.

Commodity Prices Strengthen

(Annual averages, indexes: 1982 = 100)



*June average

The state's population has been growing approximately 2% per year for the past several years, twice the national growth rate. In 1987, the state's unemployment rate is estimated to have averaged 5.7%, below the national civilian rate of 6.2%

Jobs Generated by 1986 Defense Contracts in FI Territory

	Defense-Generated Employment	% of Total Employment
Louisiana	31,348	4.89
California	490,420	4.35
Indiana	68,962	3.10
Arizona	40,745	3.04
Texas	176,962	2.69
Alaska	5,417	2.44
Washington	42,776	2.42
Colorado	33,317	2.38
Utah	14,902	2.35
Hawaii	9,256	2.12
North Dakota	3,734	1.50
Oklahoma	14,782	1.30
New Mexico	6,417	1.22
Iowa	12,942	1.20
Wisconsin	21,179	1.05
Wyoming	1,711	0.86
Oregon	8,151	0.77
Idaho	1,366	0.41
Nevada	1,832	0.39
Montana	954	0.35
D.C.	1,967	0.04
FI Territory	**989,141**	**2.74**

Note: All calculations based on unrounded data

(see accompanying graph).

Leading basic sectors in the state have included construction (employment growth of around 15% in 1987), tourism, defense-related manufacturing and services, and various business services (ranging from computer programming to temporary personnel services). As in much of the rest of the nation, employment in retail trade and services has been growing faster than in most other sectors. In California, an important factor in retail trade and services growth has been visitor spending (both vacation and business), estimated to have increased 10% in 1987.

After leading the recovery in 1983–84, the high-tech manufacturing sectors of electronic components and computers slowed dramatically in 1985 and 1986, but finally started to improve in 1987. Agricultural employment leveled off in 1987 after declining almost continuously since 1982.

More Growth, Then Slowdown

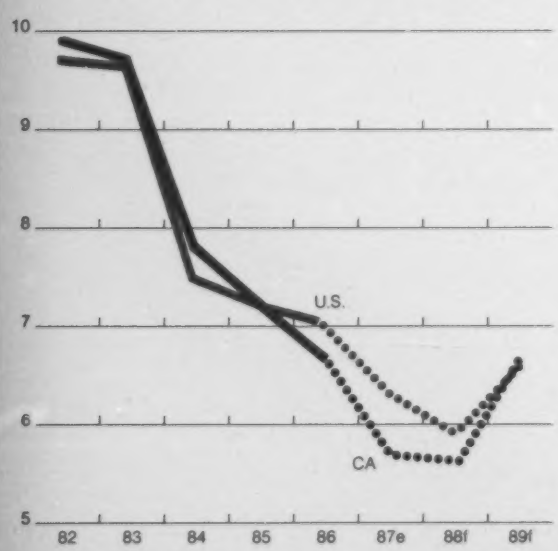
1988 will be another year of growth in California, although at a slower rate than in 1987. Nonfarm employment is forecast to increase 2.9%, close to the national rate of increase (see accompanying graph). Although personal income is forecast to increase faster than the national rate, 8.9% versus 8.2%, California's rate of inflation, as measured by the California consumer price index, is forecast to increase 0.6 percentage point above the national rate. Most of the difference in income growth will be absorbed by greater inflation in the state. The rest of the difference will come from a slightly greater productivity gain in the state than in the nation.

The high-tech sectors of electronics and computers began to experience significant increases in orders during the first part of 1987. Part of this gain was because of the general economic rebound in the nation and part was because of the international competitive revival resulting from the decline in the value of the dollar, particularly relative to the Japanese yen.

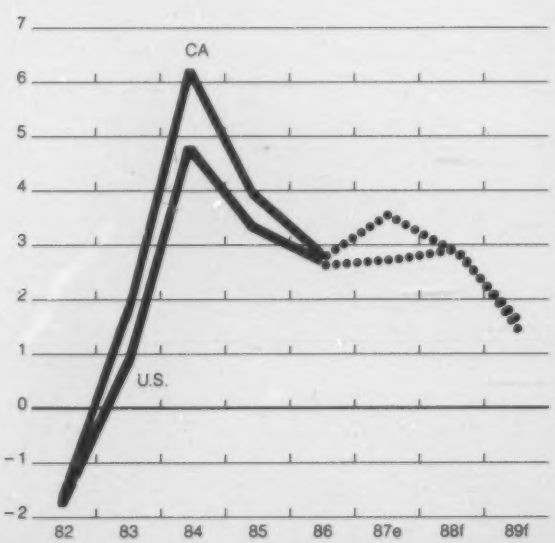
California will not be immune to the national downturn in 1989. Although on a year-over-year average basis, nonfarm employment is forecast to increase by 1.3% — less than the national average of 1.5% — growth is forecast to be flat to negative by the end of the year. The state will face a particular problem based on the expected peaking of aerospace (aircraft and missiles) production and employment by early 1989.

The construction boom in the state has lasted well into 1987, but this sector will turn down during the forecast period on both the residential and nonresidential sides. Housing-unit permits historically have been much more cyclical in the state than in the nation, that is, have higher peaks and lower troughs (see graph on next page). Total housing construction in

California Unemployment Rate Falls Below Nation's
(Unemployment as percent of total labor force, yearly averages)



Future California Growth to Parallel U.S.
(Annual nonfarm employment growth)



the state during the five years, 1983–87, has been essentially in balance with the growth of households. Given rising mortgage interest rates and a lack of high levels of pent-up demand at current housing prices, permits taken out by builders are forecast to decline in California by 8% in 1988 and a further 20% in 1989. Even with these rather large declines in percentage terms, housing-unit permits in 1989 are forecast to be 190,000, which is substantially above the lows reached in the depressed 1980–82 period. After the spectacular gains relative to the nation during the 1970s, only recently have California home-price increases again exceeded national rates (see accompanying graph).

Longer-Run Issues Now Being Examined

Although California has for years outperformed the nation by many measures of economic growth, there are concerns that this situation may not last over the period stretching to the turn of the century. The governor, the legislature, and business groups recently have commissioned economic development analyses and plans. Although these studies are in some respects like those that many other states have done recently in light of difficult circumstances, the difference between California's position and those of other states is an attempt to anticipate rather than react to problems that may lie ahead. Thus far, the California studies have identified a variety of external forces important to the state that cannot be affected by state policy, as well as policy areas where the state can take action to improve its future development prospects.

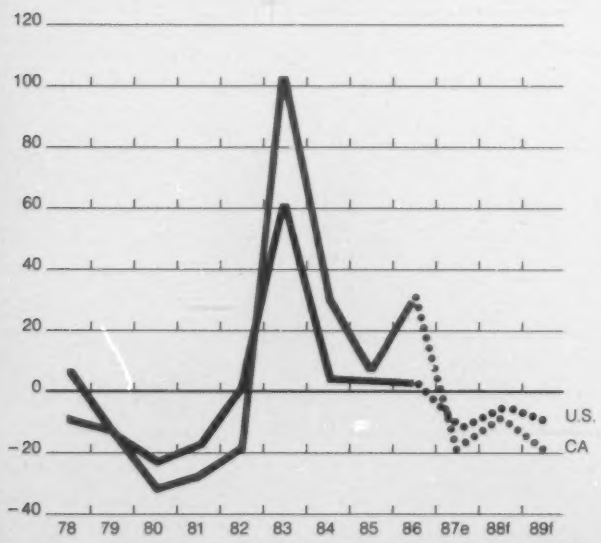
The various analyses of the state tend to focus on several external forces. First, there is increasing global competition in some of the basic goods and services that have been important to California's past above-average performance, including high-tech manufacturing and services, financial services, and agriculture. Second, the demography of California is undergoing probably the most dramatic changes of any state in the nation as immigration and differential birth rates affect the composition of the state's population. Third, defense spending, which directly and indirectly accounts for around 10% of state output and employment, will grow much more slowly over the foreseeable future.

The arenas where state policy actions can improve the well-being of the great majority of citizens include: education, particularly elementary and secondary schools; infrastructure, including highways and waste treatment systems; energy; water; and utility and telecommunications regulation. In many of these areas the state has changed dramatically over the past several years.

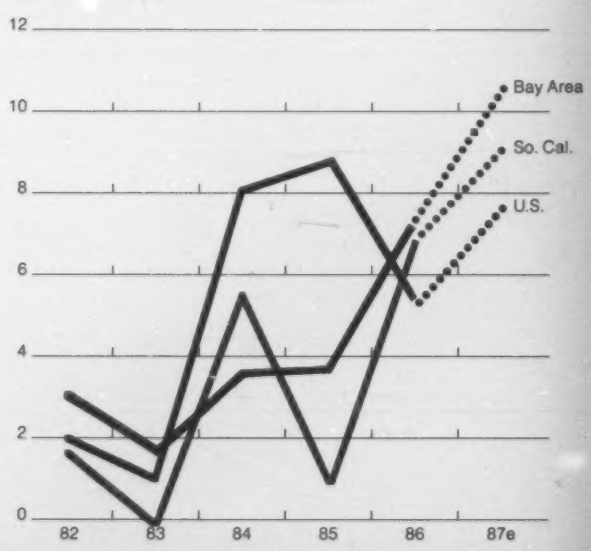
For example, the fears of a decade ago that the state would face power shortages and "brownouts" because of lack of additional power plants have proved groundless. In fact, the state now faces power surpluses both from in-state sources and the bountiful supplies now available from other regions where capacity expansion has far outrun demand. The critical issues now are more in the area of modernized regulatory rules and bodies that can take advantage of the new realities facing the state.

The dominant population centers of the state are in near-desert environments, and water-project development has always been central to the state's growth. New approaches to water allocation—particularly the development of marketable rights—are likely to prove a more efficient means of addressing Southern California's future water needs than massive new projects. Both approaches would be subject to major political debate, but this is a necessary part of addressing California's economic future and the futures of those states that remain economically distressed.

California Housing More Cyclical than U.S.
(Housing unit permit growth, annual percent changes)



California Home Price Increases Again Outpace Nation's
(Annual percent changes)



Nonfarm Employment

	1986		Estimate 1987		Forecast 1988		Forecast 1989	
	Thousands	% Change	Thousands	% Change	Thousands	% Change	Thousands	% Change
Alaska	222	−3.7	213	−4.0	209	−2.0	208	−0.5
Arizona	1,341	4.9	1,386	3.3	1,434	3.5	1,484	3.5
California	11,280	2.7	11,675	3.5	12,014	2.9	12,170	1.3
Colorado	1,402	−1.2	1,411	0.6	1,432	1.5	1,452	1.4
D.C.	641	1.5	651	1.6	661	1.6	669	1.2
Hawaii	437	2.7	451	3.2	464	2.8	471	1.5
Idaho	334	−0.5	341	1.9	349	2.4	353	1.3
Indiana	2,228	2.7	2,303	3.4	2,379	3.3	2,439	2.5
Iowa	1,077	0.3	1,102	2.3	1,129	2.5	1,143	1.2
Louisiana	1,524	−4.2	1,475	−3.2	1,452	−1.6	1,452	0.0
Montana	276	−1.1	277	0.5	280	1.0	283	1.0
Nevada	469	5.0	497	6.1	530	6.5	561	5.9
New Mexico	528	1.4	536	1.5	547	2.0	554	1.3
North Dakota	249	−1.0	249	0.0	252	1.2	253	0.5
Oklahoma	1,139	−2.2	1,121	−1.6	1,125	0.3	1,130	0.5
Oregon	1,057	2.6	1,092	3.4	1,120	2.5	1,140	1.8
Texas	6,581	−1.2	6,455	−1.9	6,468	0.2	6,507	0.6
Utah	635	1.6	643	1.3	656	2.1	663	1.0
Washington	1,770	3.5	1,839	3.9	1,898	3.2	1,953	2.9
Wisconsin	2,015	1.6	2,057	2.1	2,113	2.7	2,146	1.6
Wyoming	199	−3.8	191	−4.0	189	−1.0	189	0.0
FI Territory	35,403	1.1	35,966	1.6	36,700	2.0	37,220	1.4
U.S.	99,610	2.0	102,055	2.5	104,815	2.7	106,400	1.5

Personal Income

	1986		Estimate 1987		Forecast 1988		Forecast 1989	
	Millions	% Change	Millions	% Change	Millions	% Change	Millions	% Change
Alaska	$ 9,430	−0.5	$ 9,336	−1.0	$ 9,569	2.5	$ 10,048	5.0
Arizona	44,092	8.1	47,310	7.3	50,811	7.4	54,876	8.0
California	454,094	7.2	489,059	7.7	532,586	8.9	570,399	7.1
Colorado	49,361	3.1	50,842	3.0	53,384	5.0	56,587	6.0
D.C.	11,877	4.5	12,411	4.5	13,107	5.6	13,893	6.0
Hawaii	15,621	7.3	16,714	7.0	17,967	7.5	19,279	7.3
Idaho	11,435	2.3	11,881	3.9	12,594	6.0	13,412	6.5
Indiana	71,183	4.0	75,596	6.2	81,946	8.4	88,502	8.0
Iowa	37,683	3.8	40,321	7.0	43,063	6.8	45,646	6.0
Louisiana	50,142	−0.7	50,142	0.0	51,596	2.9	54,124	4.9
Montana	9,752	7.6	10,142	4.0	10,649	5.0	11,235	5.5
Nevada	14,532	7.2	15,840	9.0	17,424	10.0	19,166	10.0
New Mexico	16,317	3.1	16,888	3.5	17,733	5.0	18,797	6.0
North Dakota	8,341	1.0	8,942	7.2	9,469	5.9	9,962	5.2
Oklahoma	40,742	0.9	41,149	1.0	43,001	4.5	45,280	5.3
Oregon	35,579	4.9	37,560	5.6	39,920	6.3	42,410	6.2
Texas	224,626	1.8	227,546	1.3	238,923	5.0	252,064	5.5
Utah	17,875	3.6	18,232	2.0	18,870	3.5	19,795	4.9
Washington	64,969	6.2	69,517	7.0	74,244	6.8	78,996	6.4
Wisconsin	66,045	5.1	69,545	5.3	74,691	7.4	80,218	7.4
Wyoming	6,678	−0.8	6,477	−3.0	6,413	−1.0	6,413	0.0
FI Territory	1,260,372	4.7	1,325,451	5.2	1,417,960	7.0	1,511,102	6.6
U.S.	3,486,206	5.3	3,698,865	6.1	4,002,171	8.2	4,266,315	6.6

Note: All calculations based on unrounded data

Industry Perspective

The ongoing economic expansion with limited inflation has induced many U.S. industries to restructure and consolidate. Continued expansion of the economy through 1987 and 1988 is strengthening both goods- and service-producing sectors, but a slowdown or recession in 1989 would accelerate a shakeout in industries with weaker long-term prospects. Rising interest rates, uncertain energy prices, and competition at home and abroad will have uneven effects among industries. Those experiencing long-term expansion will lose momentum in 1989, but they should recover quickly.

Overview—Most Industries Face Similar Challenges

Some of the common factors to which all U.S. industries must adapt include:

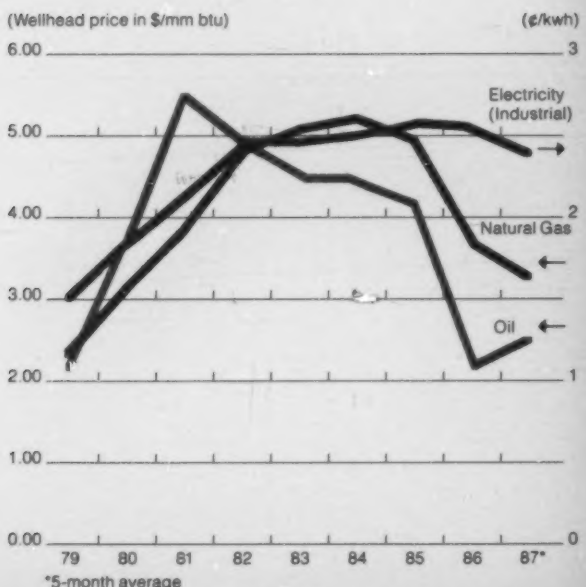
- higher rates of inflation
- rising rates of interest
- foreign competition and currency revaluation
- variable, but possibly declining, real energy prices
- legislative and regulatory changes, heightened by 1988 election campaigning, including the threat of increased taxation
- ongoing evolution of technology
- a stall and probable downturn in real growth in 1989.

Some industries will adapt better to these changes than will others, resulting in very different performances during the forecast period. Below we examine some of these factors and how selected industries can be expected to perform.

Weaker U.S. Dollar to Have Broad Impact

A further drop in the foreign-exchange value of the dollar should stimulate sales of U.S. exports, holding all else constant; standardized goods that are sold largely on the basis of price should be most affected. The industries most likely to benefit from further depreciation of the dollar include chemicals, paper, and steel, as well as appliances, computers, and elec-

Energy Prices Have Moderated



tronics. Exports of these products have picked up in recent months compared to year-earlier levels, apparently in response to the sustained depreciation of the dollar. Although the farm sector would benefit from a weaker dollar, other factors, such as increased production capacity abroad, are likely to hamper growth of U.S. agricultural exports in the near term.

Further depreciation of the dollar also translates into even higher prices for imported products, which already have risen significantly in recent months. Import-sensitive industries, such as autos, steel, and semiconductors, may see slower erosion of their domestic market shares as consumers respond negatively to higher import prices. Domestic producers that rely on imported inputs will also see these costs rise, however.

Continued depreciation of the dollar may accelerate foreign producers' plans to establish manufacturing plants in the United States. Although firms relocate for a number of reasons, such as proximity to the U.S. market, a weaker dollar translates into lower production costs in terms of the foreign currency if dollar costs are held constant. Industries most likely to be affected by this trend include autos, semiconductors, appliances, and steel.

Energy Prices to Remain Low but Volatile

The United States is importing a larger share of its oil now than just a few years ago, but there is little likelihood of a major oil price shock within the next several years. Middle East producers control a large percentage of non-communist world production, yet it is becoming increasingly clear that it is not in the interest of the major exporting countries to curtail output as much as would be required to maintain prices above $20 per barrel. An oil price fluctuating somewhere between $10 and $20 per barrel (in real terms) seems probable over the next several years, though temporary excursions outside this broad range would not be surprising. Our own estimate is that nominal U.S. domestic oil prices will average between $16.50 and $18.50 per barrel during the 1988–89 forecast period. In real terms, prices could decline in 1989 as a result of world economic slowdown. Were the political situation in the Middle East to stabilize in the near term, there could be a substantial transitory price decline as inventories are cut.

In many ways, energy consumers are well on their way to adapting to higher and less predictable real energy prices in the 1980s by adopting less energy-intensive technologies and diversifying energy sources. Both in the United States and elsewhere, the energy/output ratio has been declining. Utilities and industrial consumers have brought on fuel-switching capabilities, substantially reducing their vulnerability to sudden price changes.

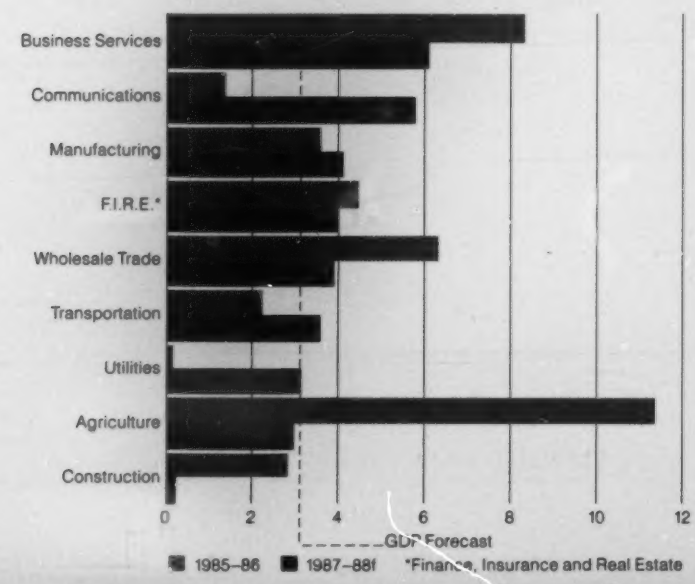
Nevertheless, it may be too early to write off OPEC as a failed cartel. The concentration of supply of a substantial portion of world output in the Middle East generally, and Saudi Arabia in particular, creates enormous incentives among producers to cartelize. Lack of a mechanism to enforce output quotas, however, seriously undermines the effectiveness of a long-term agreement. Still, the potential gains from even a partially successful output restriction make producers unwilling to abandon the effort.

Other energy prices generally will track oil prices with only minor leads or lags. Natural gas prices, in particular, have become highly responsive to short-term market movements. This is due both to evolution of a more pro-competitive regulatory environment and to the emergence of what is essentially a national market in natural gas.

A lesson that should have been learned from the last fifteen years is that the supply of petroleum is responsive to price, especially over time. But the critical price on the supply side is the expected, long-term price, rather than the current spot price. This raises a question about whether energy producers in the United States and elsewhere have fully adapted to prevailing prices, or still further adjustments are in order even at current price levels.

While we are forecasting somewhat

Output Growth Will Be More Even
(Annual percent increase in gross domestic product)



lower oil prices in 1988 and 1989 than prevailed during much of 1987, we believe domestic energy producers have already adjusted to expectations of lower energy demand relative to aggregate output. Also, U.S. producers are able to offer a higher quality product—that is, one less susceptible to supply disruption—than producers in developing nations. Finally, we think that Saudi Arabia will continue to control a sufficient share of production so that it will, in effect (though not by intent), provide something of a price umbrella for other producers. Thus, while we expect some further decline in domestic oil output, the reduction should be less than the 3% decline experienced in 1986.

Energy prices are important not only because of their impact on oil producers and oil-producing areas, but also because of their impact on consumers—both individuals and firms. If, indeed, oil prices decline in real terms, our national oil-import bill on a real basis will be reduced. Industries particularly sensitive to energy prices—for example, transportation, agriculture, and petroleum refining—stand to gain. Generally, however, it is exceedingly difficult to make a useful quantification of the impact energy prices have on individual industries because of the tremendous array of demand interactions, input substitutions, and redistribution effects involved when energy prices change.

Agriculture—Near-Term Stability but Vulnerability to Policy Changes

Farm net income is expected to stabilize in the near term, supported by a continuing high level of government payments to farmers and higher livestock prices. Annual farm production expenses are likely to remain near recent low levels, since rising interest rates will be offset by lower feed prices. Although farmland prices appear to have stabilized, the sale of land now held by agricultural lenders could send prices lower. Both the volume and dollar value of U.S. farm exports have increased in recent months from year-ago levels, but export earnings remain vulnerable to falling crop prices in the forecast period.

Federal farm subsidies will continue to postpone adjustment in the farm sector to lower global prices. Although planned production will decline in 1988 under government acreage-reduction programs, domestic crop surpluses will remain high as participation in federal programs continues to rise. Under pressure to control federal farm spending, Congress is currently considering legislation to modify the 1985 Food Security Act. Proposals range from mandatory production controls, which would raise domestic crop prices and thereby eliminate federal subsidies, to a "decoupling" plan that would eliminate minimum planting requirements from farm subsidy programs and provide for a phase-out of subsidy payments.

Autos—Weaker Domestic Sales as Foreign Competition Intensifies

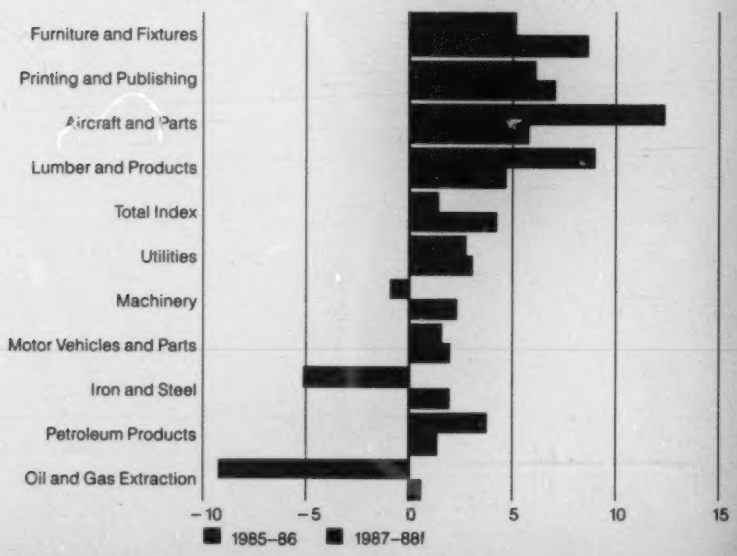
Our forecast for lower auto sales during 1988 and 1989 compared with 1985–86 highs reflects primarily a weakening in sales of domestic models, which we expect to decline significantly in the next two years. The share of the U.S. auto market held by imports has reached nearly 30%. Sales of imported autos will remain at a high level, but large price increases on foreign models will end the rapid growth rates achieved in recent years.

Our domestic production forecast includes increasing output of foreign companies manufacturing autos in the U.S. Such production is expected to increase in the next four years. Finally, U.S.-based automakers face challenges from Japanese firms moving to the more lucrative mid-size and luxury segments as well as from an influx of foreign models from new producers in developing countries.

Transportation—Traffic Pickup but Flat Profitability

As it has for each year during the current economic expansion, air transportation traffic should continue to grow in the near term. Industry revenues, though, will remain flat because of further declines in airline fares, reflecting both continued

Production Increases for Key Industries
(Annual percent increase in industrial production indexes)



improvements in labor productivity and operations efficiency. Traffic as well as revenues could decline in early 1989 if there is a general business slowdown.

The growth of air traffic has outpaced airport and air traffic control capacity. Press reports of public dissatisfaction with airline delays and concerns about safety have not yet been reflected in air traffic data. Still, the Administration, Congress and the regulatory agencies can be expected to take further action in the next few years, including increased funding for airport expansion, modernization of the air traffic control system, and management and regulatory changes to strengthen airline safety. Such action would be particularly likely in the event of a rash of accidents.

The growth of civilian air travel has supported strong demand for commercial aircraft, an industry in which U.S. manufacturers have developed a strong comparative advantage. This advantage reflects gains from long experience, a substantial lead in technology, and a history of participating in worldwide markets. This advantage is not invulnerable, as aircraft manufacturing is increasingly an international undertaking. We expect, however, that U.S. firms will maintain their share of a growing world market; accordingly we forecast growth slightly above that of total economic output.

Trucking activity is expected to increase at a moderate pace in 1988, supported by sustained growth in industrial production. Trucking-industry profits will weaken in the near term, however, because of rate discounts, higher fuel costs compared to 1986 levels, and rising insurance premiums. Rates of entry and exit are expected to remain high as this segment continues to adjust to the post-deregulation environment.

The railroad industry faces slow growth in traffic volume in the near term, particularly for shipments of coal and grains. In addition, a slowdown in auto production and construction activity will contribute to weakness in railroad activity in the forecast period. Revenue growth will also be dampened by containment of freight rates in the face of competition from trucking. Although mergers between major railroads have been stalled by the regulators, significant restructuring of the industry will continue through formation of new, regional railroads and by merger with carriers in other modes, particularly trucking and bargelines.

Communications — New Market Opportunities Spur Expansion

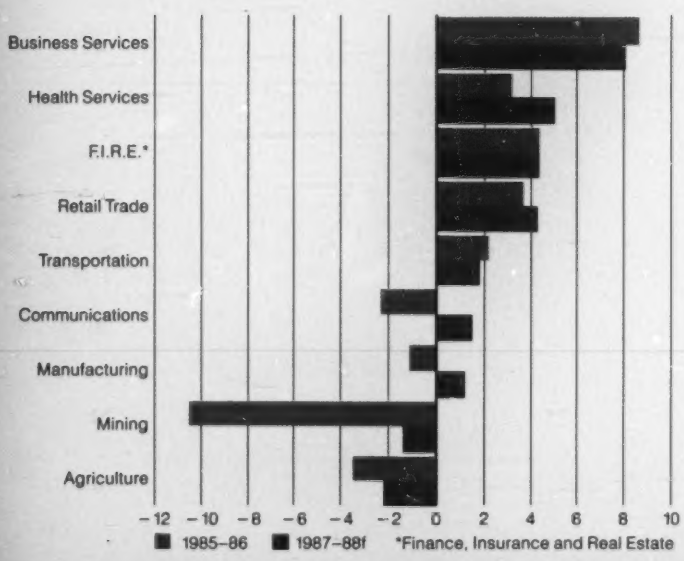
Network television will benefit from a boost in advertising revenue related to the 1988 Olympic games and the presidential election. Television advertising may slow with a downturn in economic growth the following year, although many advertisers are likely to maintain their advertising budgets even during a recession to protect their market shares. Advertising rates will increase at a slower pace than in prior years, however, now that the networks must compete aggressively with other broadcast media, including independent stations and cable television, for advertising business.

Growth in telecommunications revenues and profits is expected to remain strong, particularly in long-distance and in nontraditional types of services. The international telephone market is a major area of future expansion, as foreign trade and finance grows and the globalization process continues. Further deregulation of the telecommunications industry at home and abroad, plus technological advances, will stimulate new market opportunities despite only moderate growth in the economy in the near term.

Health Care — Adjusting to Slower Revenue Growth

The health-care industry is susceptible to a slowdown in economic growth in 1989, if rising unemployment reduces the population of individuals with health insurance benefits. Hospital admissions are expected to continue to decline, although the average length of stay appears to have stabilized recently. Hospitals that are expanding outpatient facilities and developing nonpatient sources of revenue will

Employment Trends Expected to Be Stable
(Annual percent increase in employment)



be better prepared for a cyclical slowdown in the forecast period.

Health-care providers also face slower revenue growth because of more restrictive payment policies of government and private third-party payers. Federal spending on health care is likely to be frozen at current levels in the near term. Medicare reimbursements are expected to increase less than 1% next year, far below the expected increase in health-care costs.

Support in Congress is strongest for self-financed health-care programs that will help control federal spending in this area. Legislation that expands Medicare to provide insurance for catastrophic illnesses is likely to be approved in Congress within the year. The proposals under consideration cover medical expenses above some minimum that would be paid by Medicare recipients and would be financed by raising Medicare premiums for higher-income beneficiaries.

Growth of Services Compared to Manufacturing

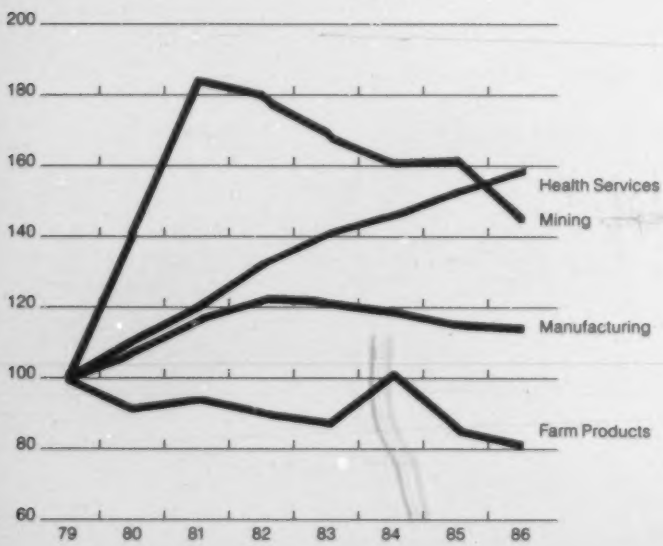
As in the past, we are forecasting relatively more growth in service jobs and output than in manufacturing, mining, and construction. This is based primarily on long-term rather than short-term considerations. Our forecasts reflect industry-specific long-term trends together with assumed impacts of overall economic activity, which we treat as similar across most industries. In short, we do not assume in our forecast that certain industries are highly cyclical while others are non-cyclical.

The increasing importance of services relative to manufacturing has been long recognized and is a subject of much expressed concern. The significance of the trend is easily misunderstood. Despite the change, manufacturing output continues to grow even as it changes in composition. Continuing increases in average labor productivity, largely associated with increased mechanization and automation, have played a larger role in manufacturing than in the service sector.

Some perspective is to be gained by considering the "decline" of agriculture. Farm employment has shrunk dramatically despite a multitude of federal programs aimed at promoting agriculture. Yet America is not at risk from lack of food and fiber but instead is a major exporter. Similarly, a relative decline in manufacturing employment is unlikely to leave the economy unable to meet demand for manufactured goods.

An additional factor complicating the comparison of manufacturing and service output is the lack of adequate measures of quality, particularly in the service sector. For example, broad measures of service prices (such as for health care) have shown consistent increases, whereas comparable indexes for manufacturing, mining, and farm products declined during 1985 and 1986. We believe the disparity would still exist, but to a lesser degree, if the data were more adequately adjusted for quality changes.

Services and Goods Price Indexes Diverge
(Gross product deflators, 1979 = 100)



U.S. Credit Markets and Financial Institutions

Financial deregulation is at a temporary impasse due to the large number of bank failures in recent years, the expectation of a continued large number of failures in 1988, and the recent erosion of bank equity capital. Although the Competitive Equality Banking Act of 1987 addresses the problems of the savings and loan industry's insurance fund, it also signals a pause in deregulation. Globalization and the loss of market share and stature by American banks, however, will be an important driving force in future deregulation. The rapid accumulation of debt in all sectors of the U.S. economy has darkened the skies and set off worrisome crosscurrents on the U.S. economic horizon. Of considerable concern is the strong growth of home-equity loans with floating interest rates. We expect the corporate financing gap to widen in 1988 and 1989, resulting in greater reliance on external financing.

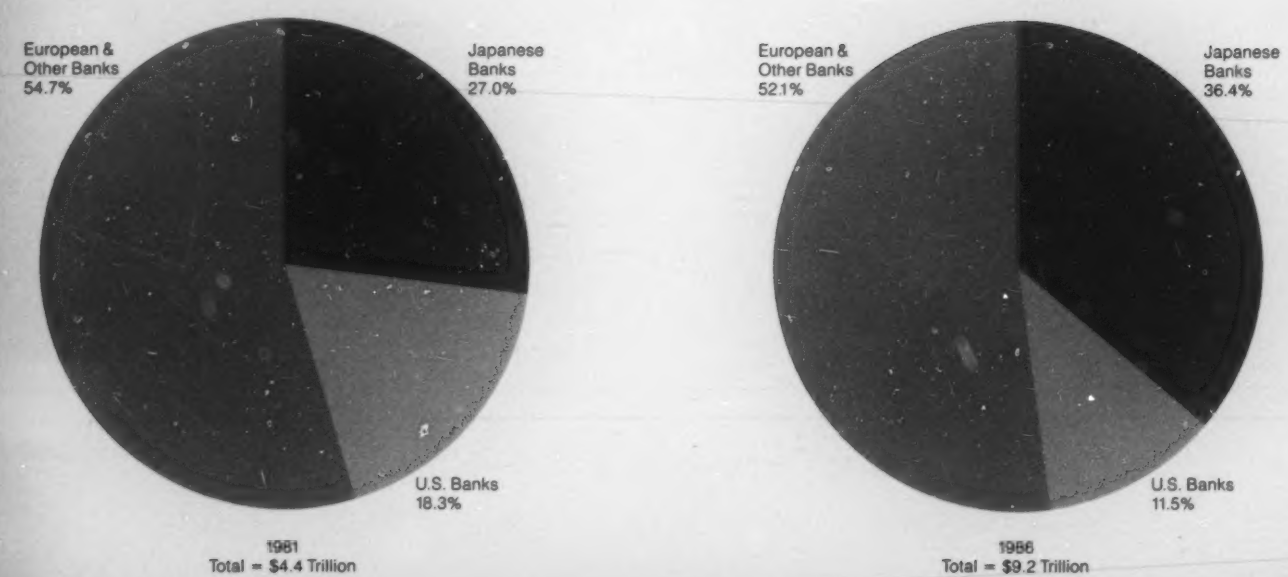
Financial Institutions — Restructuring

Enacted in August, the Competitive Equality Banking Act is the first significant body of financial legislation in five years. The urgency to respond to the problems of the savings and loan (S&L) industry's insurance fund ultimately served as a catalyst to get the law passed and avoid a presidential veto. Under the legislation, the Federal Savings and Loan Insurance Corporation (FSLIC) will be recapitalized through the issuance of $10.8 billion in the bond market over the next three years. The capitalization plan will enable FSLIC to address the plight of the estimated 460 insolvent institutions (out of a 3,200 total). Congress has instructed the Federal Home Loan Bank Board (FHLBB) to apply forbearance to ailing S&Ls with respect to capital requirements during the next three years.

A moratorium was imposed on banks' entry into the securities, insurance, and real estate businesses through March 31, 1988. At that time, Congress will decide whether to extend the moratorium or to allow modifications of the Glass-Steagall Act, which prohibits commercial banks from entering the investment banking field. This is a serious setback to the banking industry's efforts to offer its customers a wider range of services and to compete on equal terms with foreign financial institutions and "nonbank banks."

Congress gave banks some protection

Japanese Banks Gain while U.S. Banks Lose Global Market Share
(Percent of deposits at top 500 banks)



from the invasion of their historic turf by nonbank banks by permanently closing the loophole that led to formation of these entities. In recent years, several large companies, such as Sears, Merrill Lynch, General Motors, and American Express, have established extensive financial networks by utilizing the nonbank bank loophole, i.e., either making commercial loans or accepting demand deposits. The new banking act grandfathered the 168 nonbank banks in existence as of March 1987, but they will be restricted to an annual growth rate of 7% beginning in August 1988. Thus, the lawmakers have temporarily reinforced the historic principle of separation of banking and commerce.

Two consumer protection measures were included in the new legislation. One of these requires financial institutions to set interest-rate caps on all home mortgages and home-equity loans made on an adjustable-rate basis and to disclose to the borrower the extent of the cap. This is in reaction to the increased use of adjustable rates on home mortgages and home-equity loans. Concern that borrowers risk the loss of their homes in a sharply rising interest-rate environment prompted inclusion of this new requirement. A second provision of the new law limits the period during which banks can hold depositors' funds for clearance on local as well as out-of-town banks. Starting in September 1988, banks are required to clear checks faster and to speed up the process even more by 1990.

In signing the banking bill into law, President Reagan recognized the congressional intent to resolve the issue of expanded securities powers for banks during the moratorium period. Both Senator Proxmire (chairman of the Senate Banking Committee) and Representative St. Germain (chairman of the House Banking Committee) have vowed to seek a resolution. Driving the campaign for easing of the restrictions in 1988 is the penetration by foreign banks and securities firms in American markets. In addition, the ability of U.S. bank holding companies to conduct securities activities abroad is an exception that highlights the contradictions in U.S. financial regulations.

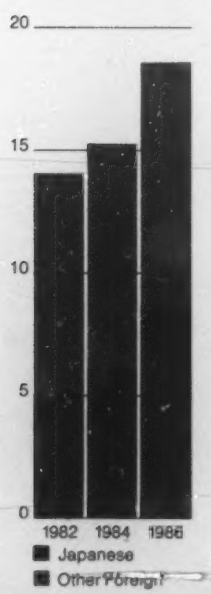
In recent months, a new consensus has developed among bank regulators identifying the deposit insurance system as a key factor in the vulnerability of financial institutions. Consequently, a determined effort could be forthcoming to reform the system. At the center of the reform movement are proposals to introduce a risk-based premium system that would discourage unwarranted risk-taking in lending and investment policies. Ultimately, this may be the most significant factor in the future of the S&L industry. Other proposals, such as merging the Federal Deposit Insurance Corporation with FSLIC or reducing the amount of coverage per account, have received little support.

In 1988, Congress is expected to consider a comprehensive approach to restructuring the financial services industry, an effort that would require enormous compromises among various competing interests. This is likely to gravitate around efforts to create a new entity, that is, the "financial services holding-company," to replace the current bank holding-company model. There will be considerable rhetoric on this issue, but it is unlikely that action will be taken on so controversial and fundamental a subject in an election year.

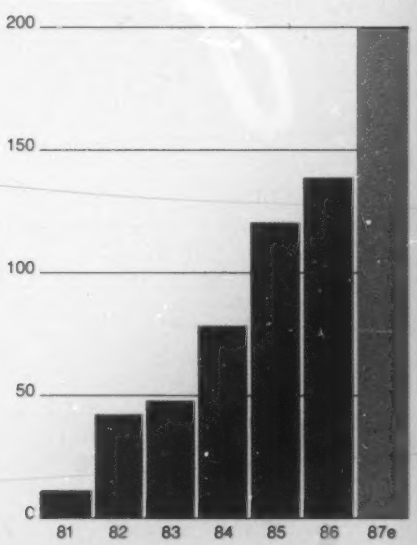
The weakened international competitiveness of U.S. banks relative to foreign banks (especially Japanese banks) provides a strong argument for further deregulation. A recent survey by the American Bankers Association reveals that Japanese banks increased their share of the global deposit market (top 500 banks) from 27.0% in 1981 to 36.4% in 1986. Much of this gain was achieved at the expense of U.S. banks, whose share declined from 18.3% in 1981 to 11.5% in 1986. Ranked by deposits in 1986, the top seven banks in the world and sixteen of the top twenty-five were Japanese. By contrast, fifteen years ago, only one Japanese bank ranked among the top ten and only six were among the top 25.

Although the high value of the yen relative to the dollar is an important contribut-

Foreign Banks' Share of U.S. Banking Market Rising
(Percent of total U.S. assets)



Bank Failures Rising Sharply
(Number of bank failures per year)



ing factor in the ascendancy of Japanese banks relative to their U.S. counterparts, there are other reasons. U.S. banks continue to operate under competitive disadvantages due to continuing restrictions against interstate banking and entry into securities markets. Japanese banks have access to a large domestic market, have been very aggressive in international lending, have lower capital requirements than U.S. institutions, and have emphasized the building of market share over near-term profitability.

Foreign banks' share of the domestic U.S. market has been rising in recent years, from 14.2% of total U.S. banking assets in 1982 to 18.7% in 1986. Successful marketing strategies, pricing, prime locations within the United States, and the long-lasting economic expansion have all contributed to this increased penetration.

Japanese banks have been dominant among foreign banks operating in the United States, accounting for virtually all of the increase in market share. These trends will increase the momentum for easing the barriers to entry that American banks have faced in their efforts to enter foreign banking markets.

An estimated 200 bank failures are expected to occur in 1987, significantly more than the 138 recorded in 1986. After a relatively stable period between 1977 and 1981, when failures numbered ten or less per year, there has been a steady rise. The number of failures may peak in 1987 as the energy and agriculture industries strengthen in 1988. The steady rise in the number of banks on the FDIC's problem list, however, to an all-time record of 1,600 in July 1987 (compared with 1,355 in the comparable period of 1986) suggests that failures will continue to occur at a historically high rate.

The continuing high failure rate, the size of the problem list, and the erosion of large banks' equity by higher loss reserves on foreign loans have combined to create an environment that could prompt increased regulation. Unless the operating performance of various segments of the banking industry improves appreciably in 1988, further deregulation and restructuring are likely to be delayed.

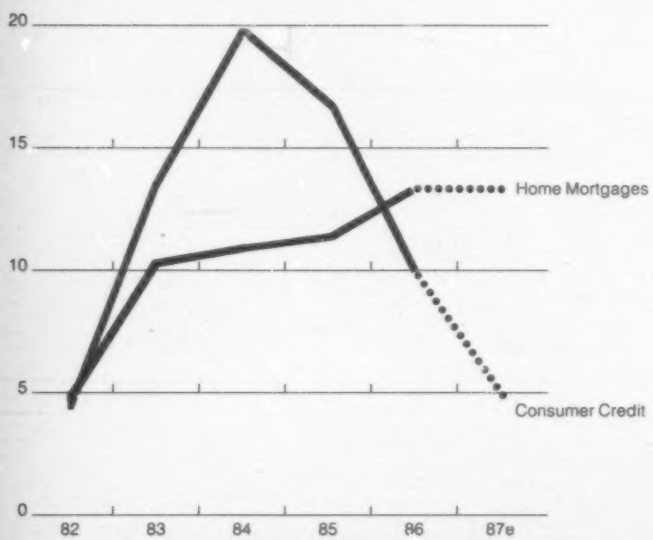
Credit Markets — Flying High on a Fragile String

The rapid accumulation of debt over the past few years has been of considerable concern to analysts as well as policymakers, mainly because of its implications for the stability of the financial system and the economy as a whole. Total domestic nonfinancial debt reached over $7.8 trillion dollars in the first quarter of 1987, up from less than $4 trillion in 1980. Consumer and nonfinancial corporate debt each make up nearly 35% of the total, the federal government's share is about 23%, and state government debt comprises the remaining 7%. For many years, growth of total nonfinancial debt closely tracked growth of the nominal gross national product. Since 1982, however, the growth of debt has far exceeded that of GNP, pushing the debt/GNP ratio from 140 percent in early 1980 to over 180 percent in 1986. Only recently have there been any indications that this trend might be slowing.

With the recent tax law changes, however, we expect to see less growth in credit-card debt and other personal loans because of diminished incentives to finance expenditures by installment credit. There should also be more reliance on mortgages since that interest remains fully tax deductible. There is concern that the shift to home-equity loans will raise risks for both lenders and borrowers. Many consumer-advocate groups have expressed concerns about this form of lending because a downturn in the economy and likely resulting defaults could cause individuals to lose their homes. Although delinquency rates on equity-backed loans historically have been low, at about 2.0% compared to 3.7% on personal loans, the consequences of default are much more serious.

As the accompanying graph indicates, consumer credit growth has decelerated substantially, while the growth of home mortgages (of which home-equity loans are an increasingly large part) has been gradually rising since 1983. We expect the

Home Mortgage Loans Outpace Consumer Credit
(Annual percent change)



demand for consumer debt to undergo further changes in composition and home-equity credit to continue as a substitute for more traditional forms of consumer borrowing. Consumer spending growth has been much slower in the first half of 1987 (after three years of very rapid growth) as a result of curtailments in purchases of durable goods, such as automobiles. For the first time in several years, the ratio of consumer debt to personal income began to decline in late 1986.

As for the corporate sector, increases in business borrowing can be explained in part by the increased access directly to credit markets by more companies as well as incentives for businesses to increase leverage. Long-term debt continues to play a major part in the financing of nonfinancial corporate business expansion. Long-term debt grew by over 14% in 1986, while short-term debt rose by less than 8%. We expect that because of high corporate profits and internal-funds generation, borrowing needs will be slight in 1987 as a whole. Commercial and industrial loans are estimated to show no growth during 1987.

The issuance of corporate bonds appears to have tapered off but is still sizable, since more companies have been able to access the market directly rather than having to go through an intermediary. For 13 consecutive quarters, outstanding equity has been withdrawn from the market, as merger and acquisition activity and attempts to avoid takeovers have resulted in huge buybacks. We expect this withdrawal to continue until 1989, although at a much slower rate (see accompanying graph) as merger activity slows and buybacks become less attractive.

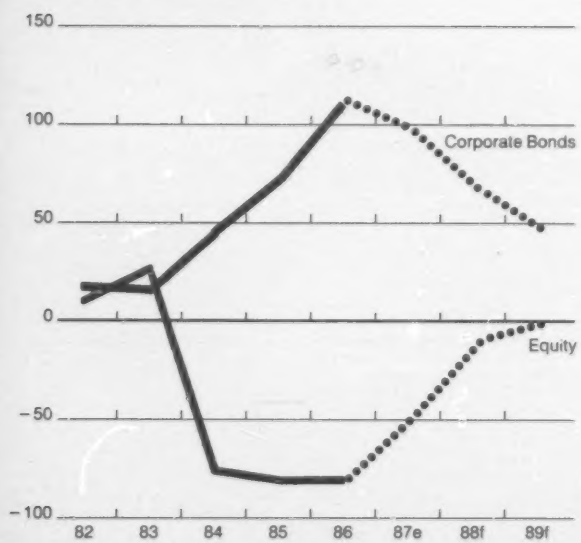
In the first quarter of 1987, the corporate financing gap, defined as the difference between capital expenditures and internal funds, widened, as inventory accumulation soared and pushed expenditures substantially above cash flow. We expect this trend has now been reversed with the reduction in excess inventories and increase in internal cash flow. This will result in the narrowest financing gap for the total year since 1983 (see accompanying graph) and explains the weakness in demand for financing in 1987. The gap is projected to widen significantly in 1988 as capital spending increases and in 1989 as internal funds slow, with a resultant increase in demand for funds. Commercial and industrial-loan growth will increase by nearly 7% by 1989 as corporations' need for funds becomes more pressing. Since interest rates will be rising throughout most of the forecast period, we expect that the market will be shifting toward shorter-term funds as the long-term market becomes prohibitively expensive and corporate treasurers await a downturn in rates.

Overall, we note that the 88% increase in private debt since 1980 has caused only a slight deterioration of household and corporate balance sheets as asset growth has also been strong. We expect that consumer-debt growth will flatten out over the next few years but still contribute to economic growth through 1988, while corporations will return to borrowing in 1989 after a year of ample funds. Equity buybacks will continue to slow, while use of the corporate bond market will taper off as interest rates rise through early 1989. However, the uncertainty with which the market regards the high levels of outstanding debt will add to the fragility of the economy throughout the forecast period.

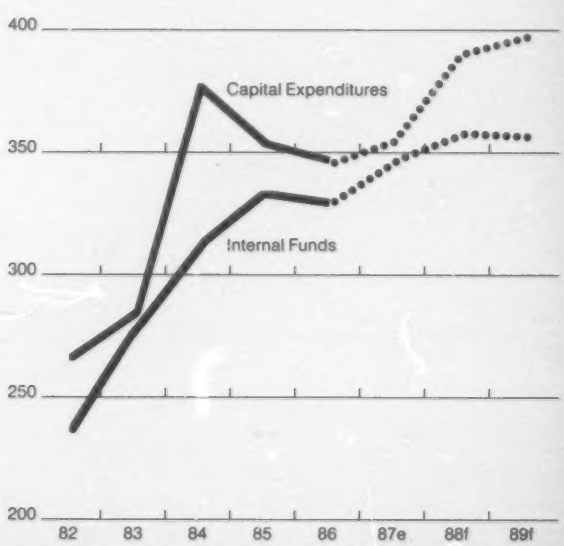
Short-Term Business Credit Demand
(Year-end to year-end changes)

	C&I Loans All Large Banks		Non-Financial Commercial Paper	
	$ billions	Percent	$ billions	Percent
1982	19.8	10.2	−3.1	−6.3
1983	6.7	3.2	−1.7	−3.6
1984	28.3	12.9	23.7	52.8
1985	5.5	2.2	15.9	23.2
1986	20.5	8.1	−7.3	−8.7
1987e	**0**	**0**	**3.0**	**3.9**
1988f	**15.0**	**5.5**	**5.0**	**6.2**
1989f	**20.0**	**6.9**	**−5.0**	**−5.9**

Long-Term Business Financing—Reduced Dependence on Bonds
(Net change in billions of dollars)

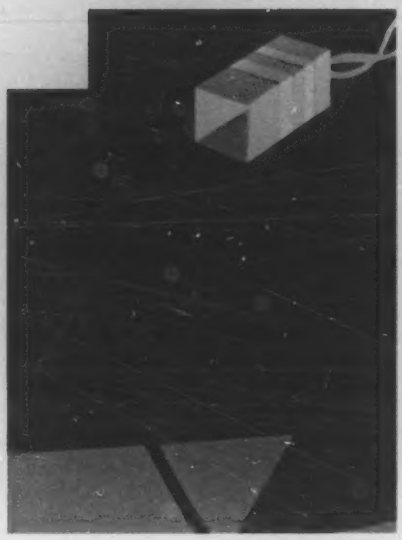


Corporate Financing Gap to Widen
(Billions of dollars)



The International Economy

The strongest winds buffeting the international economy during the next two years will continue to be the large U.S. current-account deficit and the associated capital flows. Although the current-account deficit will shrink, it will do so only with a further drop in the dollar. The exchange-rate realignment that is occurring has major implications for the growth patterns of other industrial countries, which face lower export growth and must rely more on domestic demand. Nevertheless, world trade should continue to grow relatively vigorously through 1988, before slowing in 1989. The developing countries, while improving their financial positions in 1988, will face head winds created by the reduced availability of external finance and higher interest rates on their debt.



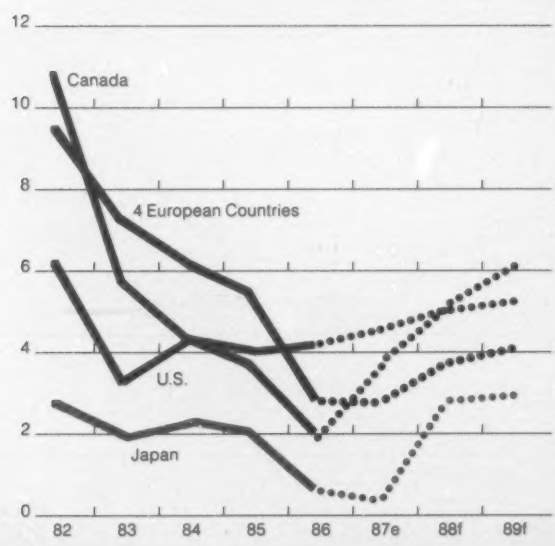
Industrial-Country Growth Pattern Shifting

Annual GNP growth in the major industrial countries is expected to remain in the 2–3% range in both 1987 and 1988. Outside the United States, growth is strongest in Japan, the United Kingdom, and Canada, while Germany and France are at the lower end of the range. Overall, industrial-country growth outside the United States should accelerate somewhat in 1988, the result of monetary, and in some cases, fiscal stimulus.

The fairly even pattern of growth shown by the GNP figures masks major shifts in the composition of that growth, particularly in the two largest countries, Japan and Germany. Both of these countries depended for a long period of time on exports to fuel economic growth and bring about increased prosperity. By 1986, however, domestic demand outpaced total real GNP growth in both countries, and that trend is continuing in the 1987–88 period. Since the export sectors of Japan and Germany will be adversely affected by the continued strength of their currencies during the forecast period, domestic demand should continue to increase more rapidly than output (measured by GNP). Such a trend suggests major structural changes in the economies of these countries.

Inflation during the 1988–89 period is forecast to show a general acceleration,

Industrial-Country Inflation Has Bottomed
(Percent change in consumer prices, annual averages)



Industrial-Country Economic Indicators

	Real GDP/GNP (% change)			Inflation (%)			Current Account ($ billions)		
	1987e	1988f	1989f	1987e	1988f	1989f	1987e	1988f	1989f
Japan	3.0	**3.3**	**3.0**	0.3	**2.7**	**2.9**	83.0	**70.0**	**62.0**
Germany	1.8	**2.0**	**1.8**	0.4	**2.6**	**2.9**	34.9	**28.7**	**18.2**
France*	1.8	**2.3**	**2.0**	3.1	**3.0**	**3.2**	3.6	**2.1**	**−1.0**
United Kingdom*	3.3	**2.9**	**1.2**	4.1	**4.8**	**5.4**	−2.5	**−4.0**	**−6.3**
Italy*	2.9	**2.5**	**1.4**	4.7	**5.3**	**5.8**	3.8	**1.4**	**−1.8**
Canada*	3.2	**2.8**	**2.0**	4.5	**5.0**	**5.2**	−5.1	**−4.2**	**−5.5**
Above plus U.S.	2.7	**3.0**	**1.4**	2.9	**4.3**	**4.9**	−32.5	**−33.8**	**−39.7**

*GDP

although less so in the other major industrial countries than in the United States. While fiscal policy is aimed at reducing budget deficits in virtually all industrial countries outside the United States, monetary policies have become expansive. This trend should be reinforced by attempts to prevent further currency appreciation against a weak U.S. dollar. Monetary growth in most industrial countries has accelerated in 1987, and, with further dollar weakness expected, monetary ease is likely to continue.

The combination of higher domestic demand growth and lower inflation than in the United States will mean that the U.S. recession expected in 1989 may not be generalized. While some slowdown in growth is expected in most other countries in that year because of slower export growth, the relatively low inflation levels projected indicate that the monetary authorities in these countries are likely to allow their currencies to depreciate rather than tighten monetary policies in line with the United States.

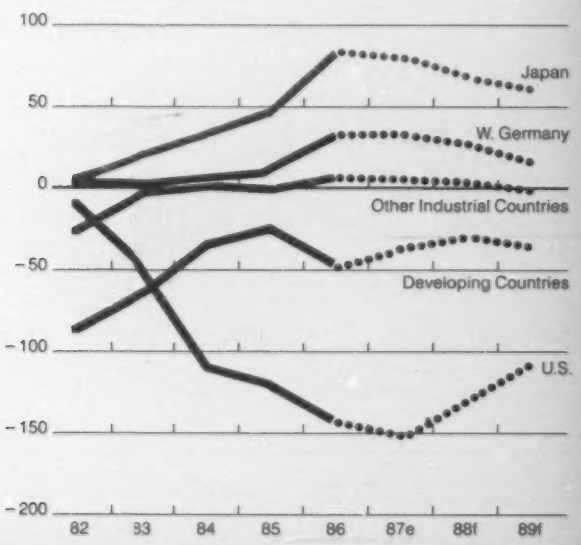
As discussed below, the dollar's fall is expected to continue. This will finally begin to produce a decline in the trade and current-account surpluses of Germany and Japan during 1988 and 1989, as indicated in the accompanying graph. Thus, the extreme financial imbalances of the past two years will be lessened. Nevertheless, Japan will continue to be the largest source of capital in international financial markets and a major influence in U.S. money markets. Germany's role as a major financial force will also continue to grow in the forecast period.

World-Trade Growth Remains Vigorous Through 1988

The current expansion of the U.S. economy has been a major factor in the growth of the industrial countries collectively since the end of the last worldwide recession. Growth in the industrial economies has provided the foundation for the increase in demand for world imports. The volume of world trade, measured by imports, surged by nearly 6.5% in 1986 after a 4.0% rise in 1985. In 1987, it appears that the volume of world imports will increase more slowly, partly because the demand for imports by the industrial countries is increasing less rapidly and partly because many suppliers cannot increase output as quickly as they did in 1986, especially for some commodities. Stronger collective real economic growth of the major industrial countries in 1988 should result in improved growth for world import volumes before the U.S. recession in 1989 slows the demand for imports in the industrial countries.

On a nominal or price-unadjusted basis, world trade growth has rebounded vigorously during 1986 and 1987 to 9.0%–9.5%

Current-Account Imbalances Diminish Slowly
(Billions of dollars)



from 1985's 1.7% rise. In 1986, world trade on a nominal basis rose faster than on a volume basis for the first time since 1980, as import prices generally rose for the first time in six years. That pattern seems likely to continue through 1989. In 1989, world trade on a nominal basis will slow, but the largest part of the decline will be due to the decline in the volume of world trade growth.

The character of world trade growth during the 1986–89 period will vary substantially from that recorded during the 1981–85 period. During the earlier period, which included the severe 1981–82 worldwide recession, the volume of world trade rose at a 2.7% compound annual rate, while nominal world trade fell 0.5% annually. During 1986–89, the volume of world trade is forecast to grow nearly 5.0% per year, while world trade on a nominal basis will increase about 8.5% annually.

World Trade
(Imports, percent changes)

	Volume	Nominal
1982	−1.0	−6.1
1983	1.9	−2.9
1984	8.8	6.4
1985	4.0	1.7
1986	6.4	9.4
1987e	**5.2**	**9.3**
1988f	**5.5**	**9.0**
1989f	**2.5**	**5.7**

Inflation rates generally are increasing, and prices for most goods traded internationally reflect this trend. In 1987, nonenergy commodity prices, on balance, have begun to recover on a U.S.-dollar basis, partially reflecting the depreciation of the dollar, and they may continue to increase until the onset of the U.S. recession. Moreover, energy prices have already regained much of their 1986 losses during the first two thirds of 1987. Thus, the character of world trade during 1986–89 will resemble that of the 1970s, when world trade on a nominal basis rose more rapidly than on a volume basis.

Developing-Country Financial Position Remains Difficult

The pickup in industrial-country growth and the associated increase in world trade volume should help the developing countries to increase the rate of real export growth. In addition, somewhat higher prices for commodities are generally favorable for developing-country exports. During 1988, therefore, the general position of the developing countries should show improvement, with rising dollar interest rates the main negative factor.

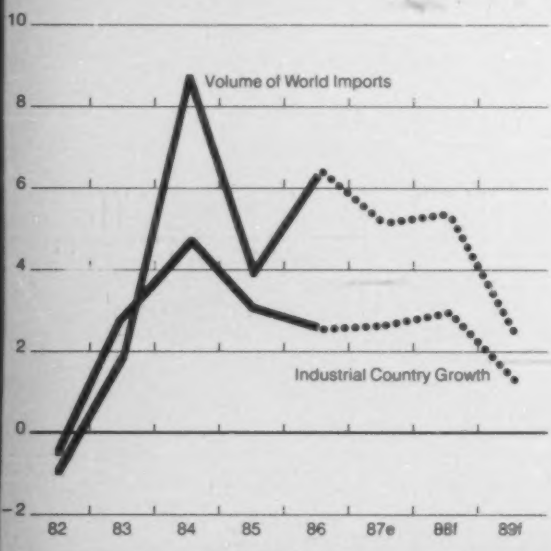
In 1989, however, the current-account positions of the developing countries could face renewed deterioration as world-trade growth slows and interest rates rise somewhat further. This will imply that, for countries exporting manufactured goods to the United States in particular, their trade surpluses could be reduced. For a few countries that now have high levels of debt in comparison to their export revenues but have not yet run into debt difficulties, rescheduling could become necessary, particularly as commercial banks seem less willing to participate in new financing.

The establishment of increased reserves against developing-country debt by American and other banks has changed the environment for developing-country finance. Although banks may participate in certain new loans, the future availability of commercial finance to already heavily indebted countries is likely to be limited. While some increase in financing may be forthcoming from official sources, total external resources will be lower than in the period through 1985.

For the debtor countries, reduced financial inflows mean that economic growth cannot be sustained without increased reliance on domestic savings and the savings held abroad by their own residents. More efficient allocation of resources will also be required — including a greater share of resources going to the private sector — if economic growth is to achieve levels that not only maintain social stability but also meet expectations of rising living standards.

Policy reforms have been carried out in most of the heavily indebted countries.

Growth in Volume of World Trade Reflects Real Economic Growth in Industrial Countries
(Annual percent changes)



Nevertheless, the accompanying graph shows that the burden of the external debt, as measured by the ratio of external debt to export revenues, has continued to grow. This is the result of slow export growth and the infusion of new loans. Although it is clear that major economic restructuring takes time, the increasing size of the debt burden is causing government officials and the public in a number of countries to question the desirability of continuing to service the debt on existing terms.

During 1987, large North American and British banks have increased their reserves against potential debt-service interruptions. The exposure of Japanese banks has been reduced both through the appreciation of the yen and through the selling of a portion of the loans at a discount to a jointly-owned offshore bank. Continental European banks generally have lower exposure and higher reserve levels.

Even without increased reserves against losses, U.S. banks were becoming less exposed to developing-country debt. In sharp contrast to the graph showing the debt burden from the point of view of the countries, the graph that charts exposure of U.S. banks shows a considerable decline since debt problems first came to the fore in 1982. As a result of lower exposure and higher reserves, the potential for major financial disruptions resulting from developing-country debt is now considerably reduced. The worsening of the debt situation of the countries themselves indicates, however, that at least a portion of the reserves may well have to be utilized during the coming two years.

Another potential implication of banks' higher loan-loss reserves is that the secondary market for developing-country debt could become more significant. Until now, this market has been relatively small, dominated by trading among banks and, in some countries, debt-to-equity transactions. The additional reserves established by major banks indicates that potential supply in the market is now much larger than in the past. However, demand is limited by both the volatile policy environment in a number of the countries concerned and the small size of the debt-to-equity market. Mexico and Chile are so far the countries that have most actively pursued debt-to-equity swaps.

The development of a deeper secondary market that would be attractive to investors could potentially provide a new source of funds for developing countries. In the interim, however, the weakness of prices in this market that has followed the announcement of increased bank loan-loss reserves has limited transactions. Nevertheless, the secondary market should continue to become more important.

U.S. Dollar to Depreciate Further

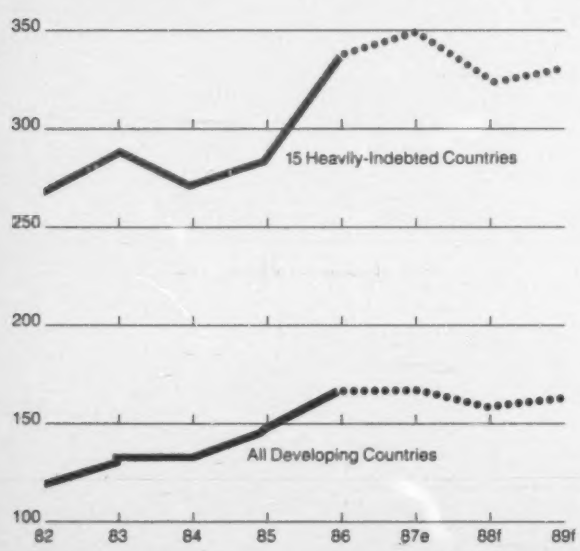
Despite the appreciation of the dollar during the middle months of 1987, we expect the U.S. currency to continue its general trend of depreciating against most other industrial-country currencies. Economic and political fundamentals have not changed sufficiently to provide a basis for the dollar either to hold at current levels or to appreciate. The U.S. budget deficit is forecast to increase substantially in both fiscal 1988 and 1989. The U.S. current-account deficit will also remain large, although we are forecasting that it will decline in 1988 and 1989 from 1987 levels, as discussed below.

In addition, U.S. inflation is expected to trend upward until the forecast recession in the United States takes hold in the second half of 1989. Inflation rates elsewhere will generally rise, but the inflation differential between the United States and other industrial countries should generally deteriorate during the forecast period. Thus, until well into the U.S. recession, real interest rate differentials are likely to narrow and help depress the dollar. Finally, it is difficult to foresee this U.S. administration regaining the confidence it once commanded on the foreign-exchange markets.

We have forecast the value of the dollar against four industrial-country currencies, illustrated in the graph on the facing page. Of the four, the U.S. dollar is expected to depreciate most against the yen and the

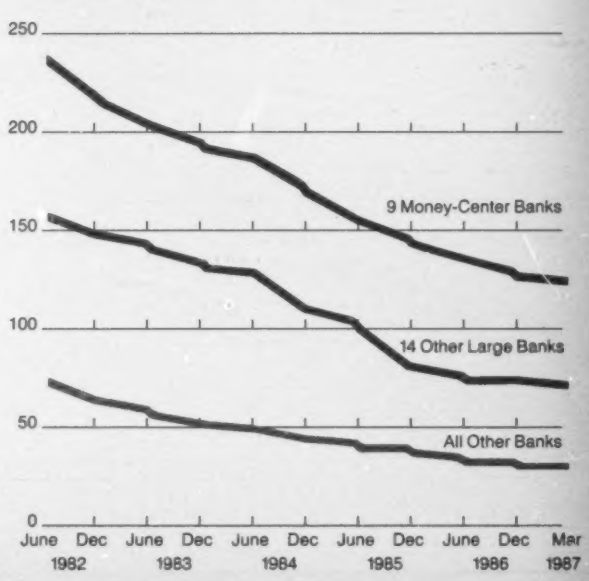
Debt Problems Persist

(Ratio of external debt to exports of goods and services, percent)



Banks Less Exposed to Problem Debtors

(Ratio of loans to 15 heavily-indebted countries to primary capital, percent)



U.S. Current Account
(Billions of dollars)

	1983	1984	1985	1986	1987e	1988f	1989f
Trade Balance	−67.2	−114.1	−124.4	−144.3	**−150.5**	**−126.0**	**−100.0**
Exports	201.7	219.9	214.4	224.4	**238.5**	**254.0**	**265.0**
Imports	−268.9	−334.0	−338.9	−368.7	**−389.0**	**−380.0**	**−365.0**
Service Balance	30.1	18.2	21.8	18.6	**16.5**	**15.0**	**12.0**
Service Exports	132.8	142.1	144.1	148.4	**154.0**	**160.0**	**165.0**
Service Imports	−102.8	−123.9	−122.3	−129.8	**−137.5**	**−145.0**	**−153.0**
Transfer Balance	−9.5	−11.4	−15.0	−15.7	**−16.2**	**−16.8**	**−17.3**
Official	−8.5	−10.1	−11.2	−11.8	**−12.1**	**−12.5**	**−12.9**
Private	−1.0	−1.3	−3.8	−3.9	**−4.1**	**−4.3**	**−4.4**
Current-Account Balance	−45.6	−107.4	−117.7	−141.4	**−150.2**	**−127.8**	**−105.3**

mark, the result of relatively low inflation and large current-account surpluses in those countries. The pound could show some weakness during the period due to larger U.K. current-account deficits. Finally, higher U.S. inflation and the liberalization of Canadian economic policies are expected to provide further support for the Canadian dollar.

U.S. Current-Account Deficit to Decline in 1988

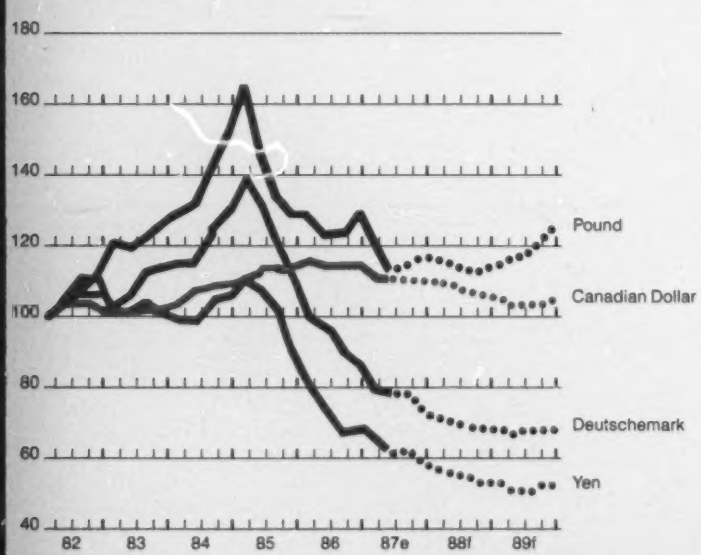
In contrast to many forecasts made in 1986 for the U.S. current-account deficit to decline substantially in 1987, last year's *Forecast* looked for the deficit to worsen during the year. Actual figures for the first half of the year and our current estimate for the second half indicate that the deficit will indeed increase in 1987 before falling in 1988 and 1989, as the data in the table suggest.

We estimate that the trade deficit during 1987 will be about $6 billion larger than that for 1986. A trade deficit of $150.5 billion for 1987, however implies that the deficit for the second half of 1987 will be less than the $78.3 billion deficit for the first half of the year.

The depreciation of the dollar on the foreign-exchange markets has made U.S. exports more competitive internationally while diminishing the competitiveness of U.S. imports. Foreign exporters to the U.S. market are finding it more difficult to hold down price increases to try to maintain market share. Meanwhile, much of the growth of the U.S. economy will result from an improved net-export sector, with less reliance on strong domestic demand.

Given the weaker dollar and lessened domestic demand growth, U.S. imports are expected to decline absolutely during 1988. During 1989, the likely recession in the United States will slow demand for imports further. Our forecast indicates that the rise in oil prices during the first eight months of 1987 will overstate the rise for the year as a whole. On average, prices should be little changed during 1988 from average 1987 levels; however, we expect considerable volatility in prices during 1988. For 1989, the assumed U.S. recession and the ensuing slowdown in the other industrial economies, which should lead to lower growth in the developing world, will place downward pressure on oil

U.S. Dollar to Depreciate Further
(Quarterly indexes of the dollar against selected currencies, 1982:1 = 100)



prices. As a consequence, the U.S. oil import bill should not increase sharply during the second half of 1987 or during 1988, and it should actually decline during 1989.

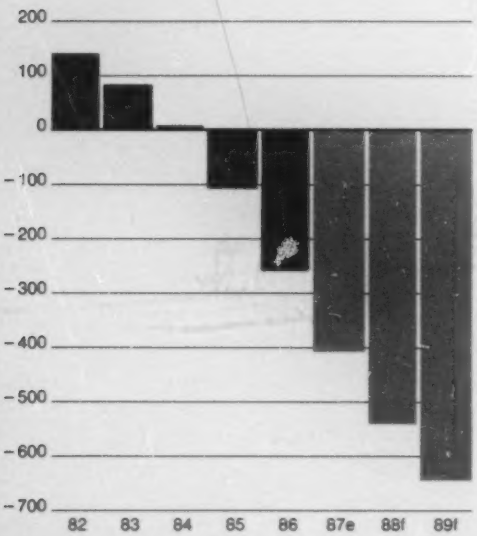
U.S. exports have already begun to grow more vigorously. On a balance-of-payments basis, exports for the first half of 1987 were up 5.6% over first-half 1986 levels. Continued growth of U.S. export markets during the remainder of 1987 and through 1988, together with the depreciation of the U.S. dollar, will promote further gains. One potential factor affecting the outlook for the trade deficit would be the enactment of a trade bill in the United States. As of this writing, separate bills have been passed by large majorities in both houses of Congress. These bills would impose restrictions on imports from countries running large bilateral trade surpluses with the United States if these countries were found to be pursuing policies leading to restraints against U.S. exports or if they were not making efforts to open their markets to imports. It is clear that the countries targeted are very specific—Japan, Taiwan, and South Korea; these bills are not generally protectionist as were the trade-tariff bills enacted during the 1920s and 1930s. It remains to be seen whether or not a single bill will be passed by the Congress, and whether or not the Congress could override a presidential veto.

If such a bill were to become law, its effects on the U.S. current account would depend on actions followed in the United States and responses elsewhere. Countries targeted might opt to open their markets to avoid any penalties to their exports, which would result in improved export opportunities for U.S. producers. Alternatively, they might decide to retaliate and apply their own restrictions against U.S. exports, which would probably still result in a smaller U.S. trade deficit than otherwise. (The costs would be felt in other areas, such as a higher cost of living.) The latter possibility seems less likely, given the countries most vulnerable to the most probable law.

The United States last [illegible] a current-account surplus in 1981. [illegible] most readily observable result of the ensuing string of large and growing current-account deficits has been that the United States became a net debtor in 1985 for the first time since 1914. Current-account deficits must be offset by capital inflows from abroad. As a consequence of the current-account deficits forecast for the 1987–89 period, U.S. net indebtedness will continue to rise.

At the end of 1986, U.S. net external indebtedness (defined as U.S. assets abroad minus foreign assets in the United States) was the equivalent of 6.2% of GNP. By 1989, it is projected to rise to 12.4%. Although this percentage is not large in comparison to many other countries, the rising trend shows little prospect of ceasing in the foreseeable future. It also implies that the United States is committing itself to servicing that indebtedness, either by selling more goods and services abroad than we buy or by continuing to sell domestic assets to foreigners. During 1986, the major sources of funds buying U.S. assets and financing the U.S. current-account deficit were the countries shown in the accompanying graph. Funds from the United Kingdom, however, reflect the intermediary role of the London financial market and, thus, do not imply that they were actually British funds. It is likely that a substantial portion of these funds represent Japanese interests.

U.S. Net Investment Position Continues to Deteriorate
(Billions of dollars)



London Market and Japan Largest Sources of U.S. Capital Inflow
(1986 net increase in foreign assets by source, billions of dollars)